

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

**COPPER AAS STANDARD SOLUTION
1000MG/L CU IN DILUTED HNO₃**

CAS-No.: NA

Product Code: 00847

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

1.1. Product identifier

Product form : Mixture
Trade name : Copper AAS Standard Solution 1000MG/L Cu In Diluted HNO₃

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial For professional use only

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]

Corrosive to metals, H290

Category 1

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Hazardous to the aquatic H412

environment – Chronic

Hazard, Category 3

Full text of H statements : 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
Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	H290 - May be corrosive to metals. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P273 - Avoid release to the environment. P302+P352 - IF ON SKIN: Wash with plenty of water/... P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	97.78	Not classified
Nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2	2.2	Ox. Liq. 1, H271 Skin Corr. 1A, H314
Copper Fine Powder AR (325 mesh) 99.7%	(CAS-No.) 7440-50-8	>= 0.01	Flam. Sol. 1, H228 Aquatic Acute 1, H400

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	:	If you feel unwell, seek medical advice. Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	:	If skin irritation or rash occurs: Get medical advice/attention. Gently wash with plenty of soap and water. Take off contaminated

clothing.

- First-aid measures after eye contact : Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : If you feel unwell, seek medical advice. Do not induce vomiting because of corrosive effects. Rinse mouth.

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

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

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 extinguishing media containing water.

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

Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Collect spillage.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours.
- Hygiene measures : 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 safety glasses
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	:	Liquid
Colour	:	light blue.
Odour	:	No data available
Odour threshold	:	No data available
pH	:	6 - 8 at 25 °C
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	100 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1 g/cm ³
Solubility	:	Water: Completely miscible
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

May be corrosive to metals.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Open flame. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
pH	:	6 - 8 at 25 °C
Serious eye damage/irritation	:	Causes serious eye irritation.
pH	:	6 - 8 at 25 °C
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

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

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	:	3264
UN-No. (IMDG)	:	3264
UN-No. (IATA)	:	3264
UN-No. (ADN)	:	3264
UN-No. (RID)	:	3264

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IMDG)	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IATA)	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (ADN)	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (RID)	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Transport document description (ADR)	:	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, (E)
Transport document description (IMDG)	:	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, MARINE POLLUTANT
Transport document description (IATA)	:	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III
Transport document description (ADN)	:	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III
Transport document description (RID)	:	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

14.3. Transport hazard class(es)

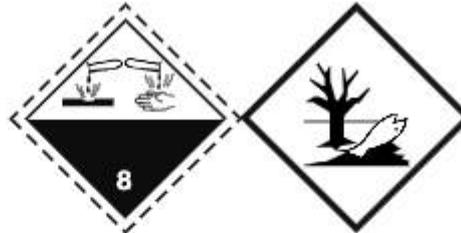
ADR		
Transport hazard class(es) (ADR)	:	8
Danger labels (ADR)	:	8
	:	



IMDG

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
COPPER AAS STANDARD SOLUTION 1000MG/L
CU IN DILUTED HNO₃
CAS-No.: NA

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8
:



IATA
Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8
:



AND
Transport hazard class(es) (ADN) : 8
Danger labels (AND) : 8
:



RID
Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8
:



MATERIAL SAFETY DATA SHEET (SDS/MSDS)
COPPER AAS STANDARD SOLUTION 1000MG/L
CU IN DILUTED HNO₃
CAS-No.: NA

14.4. Packing group

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

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	Yes (IMDG only)
Other information	:	No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	:	C1
Special provision (ADR)	:	274
Limited quantities (ADR)	:	5L
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	:	Mp19
Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions (ADR)	:	TP1, Tp28
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Hazard identification number (Kemler No.)	:	80
Orange plates	:	

80

3264

Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	B
- Transport by sea	:	
Special provision (IMDG)	:	223, 274
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, Lp01
IBC packing instructions (IMDG)	:	IBC03

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
COPPER AAS STANDARD SOLUTION 1000MG/L
CU IN DILUTED HNO₃
CAS-No.: NA

Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, Tp28
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	Sw2
MFAG-No	:	154
- Air transport		
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provision (IATA)	:	A3
ERG code (IATA)	:	8L
- Inland waterway transport		
Classification code (ADN)	:	C1
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (AND)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0
- Rail transport		
Classification code (RID)	:	C1
Special provisions (RID)	:	274
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	:	Mp19
Portable tank and bulk container instructions (RID)	:	T7
Portable tank and bulk container special provisions (RID)	:	TP1, Tp28
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
COPPER AAS STANDARD SOLUTION 1000MG/L
CU IN DILUTED HNO₃
CAS-No.: NA

Colis express (express parcels) (RID) : Ce8
Hazard identification number (RID) : 80

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 3, Highly hazardous to water
(Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de : None of the components are listed

voortplanting giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de : None of the components are listed

voortplanting giftige stoffen –

Vruchtbaarheid

NIET-limitatieve lijst van voor de : None of the components are listed

voortplanting giftige stoffen – Ontwikkeling

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
COPPER AAS STANDARD SOLUTION 1000MG/L
CU IN DILUTED HNO₃
CAS-No.: NA

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Liq. 1	Oxidising Liquids, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H228	Flammable solid.
H271	May cause fire or explosion; strong oxidiser.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

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: 11 February 2026