

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 **Product identifiers** 

> Product name Silver Nitrate Solution N/10 (0.1N)

B-02325 **Product Code** 

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

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

1.3 Details of the supplier of the safety data sheet

> **Bio-Chem Chemicals** Company

5455Nicholson Road, Science Market Ambala Cantt, 133001 - Haryana

+918295241953

info@biofinechemical.com - www.biofinechemical.com

1.4 **Emergency telephone number** 

> Emergency Phone # : +919992151495(10.00am- 06.30pm) (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 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

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 Warning

Hazard statement(s)

H290 May be corrosive to metals. H315 Causes skin irritation. H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s)

P273 Avoid release to the environment.

P302 + P352 IF ON SKIN: Wash with plenty of soap and 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.

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 Mixtures

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

Component Classification Concentration

Silver nitrate

CAS No. 7761-88-8 Oxidizing solid, category 2; skin corr 1B; >= 1 - < 2.5 %

EC No. 231-853-9 Acute Aquatic tox. 1; chronic aquatic lndex-No. 047-001-00-2 tox. 1; H272, H314, H400, H410

Water

CAS No. 7732-18-5 >= 75 - < 99 %

EC No. 231-791-2

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 immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

Immediately make victim drink water (two glasses at most). Consult a physician.

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

Gastrointestinal discomfort, irritant effects

The following applies to nitrites/nitrates in general: Methemoglobinemia after the uptake of large quantities.

The following applies to soluble silver compounds: only slightly absorbed via the gastrointestinal tract. Strong irritations after contact with eyes and skin.

#### 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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

Not combustible.

Ambient fire may liberate hazardous vapours.

#### 5.3 Advice for firefighters

Special protective equipment 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

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

#### 6.1 Personal precautions, protective equipment and emergency procedures

**Advice for non-emergency personnel:** Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

#### Advice for emergency responders:

Protective equipment see section 8.

#### 6.2 Environmental precautions

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

Advice on safe handling: Observe label precautions.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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

Requirements for storage areas and containers

No metal containers.

Storage conditions

Protected from light and tightly closed.

Recommended storage temperature see product label.

#### 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 controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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. Discharge into the environment must be avoided.

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

### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: Clear, liquid Colour: Colourless
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	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
l)	Vapour density	0,62
m)	Relative density	1.015 g/cm <sup>3</sup> 20°C
n)	Water solubility	Miscible with water
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	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

Sensitivity to light

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

#### 10.4 Conditions to avoid

Exposure to light.

#### 10.5 Incompatible materials

Aluminium, Mild steel

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) 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 oral toxicity

**Symptoms:** Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

#### Acute inhalation toxicity

Symptoms: Possible symptoms: mucosal irritations

### Acute dermal toxicity

This information is not available.

## Skin corrosion/irritation

Mixture causes skin irritation.

### Serious eye damage/eye irritation

Mixture causes serious eye irritation.

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

## 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**

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

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

### 12.6 Other adverse effects

Discharge into the environment must be avoided.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

#### Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: - 1760 IMDG: - 1760 IATA: - 1760

#### 14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, N.O.S. (SILVER NITRATE SOLUTION)
IMDG: CORROSIVE LIQUID, N.O.S. (SILVER NITRATE SOLUTION)

IATA: Corrosive Liquid, N.O.S. (Silver Nitrate Solution)

#### 14.3 Transport hazard class(es)

ADR/RID: - 8 IMDG: - 8 IATA: - 8

## 14.4 Packaging group

ADR/RID: - III IMDG: - III IATA: -III

#### 14.5 Environmental hazards

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

#### 14.6 Special precautions for user

No data available

### **SECTION 15: Regulatory information**

## 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.

H272	May intensify fire; oxidizer.
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.

H410 Very toxic 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.