



# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

### 1.1 Product identifiers

Product name : **Ammonium Persulphate**

CAS-No. : 7727-54-0

### 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 Chemicals  
5455 Nicholson Road, Science Market  
Ambala Cantt, 133001 - Haryana  
+91 82952 41953  
info@biofinechemical.com - www.biofinechemical.com

### 1.4 Emergency telephone number

Emergency Phone # : +91 99921 51495 (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

Oxidizing solids (Category 3), H272

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Respiratory sensitisation (Category 1), H334

Skin sensitisation (Category 1), H317

Acute toxicity, Oral (Category 4), H302

Specific target organ toxicity - single exposure (Category 3), H335

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

|    |           |           |
|----|-----------|-----------|
| O  | Oxidising | R 8       |
| Xn | Harmful   | R22       |
| Xi | Irritant  | R36/37/38 |
|    |           | R42/43    |

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                                                                                                                           |
| Hazard statement(s)            |                                                                                                                                  |
| H272                           | May intensify fire; oxidiser.                                                                                                    |
| H302                           | Harmful if swallowed.                                                                                                            |
| H315                           | Causes skin irritation.                                                                                                          |
| H317                           | May cause an allergic skin reaction.                                                                                             |
| H319                           | Causes serious eye irritation.                                                                                                   |
| H334                           | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                                                       |
| H335                           | May cause respiratory irritation.                                                                                                |
| Precautionary statement(s)     |                                                                                                                                  |
| P220                           | Keep/Store away from clothing/ combustible materials.                                                                            |
| P261                           | Avoid breathing dust.                                                                                                            |
| P280                           | Wear protective gloves.                                                                                                          |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P342 + P311                    | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.                                                 |
| Supplemental Hazard Statements | none                                                                                                                             |

### 2.3 Other hazards - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |   |              |
|------------------|---|--------------|
| Molecular Weight | : | 228,19       |
| CAS-No.          | : | 7727-54-0    |
| EC-No.           | : | 231-786-5    |
| Index-No.        | : | 016-060-00-6 |

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

| Component                          | Classification | Concentration                                  |
|------------------------------------|----------------|------------------------------------------------|
| <b>Diammonium peroxodisulphate</b> |                |                                                |
| CAS-No.                            | 7727-54-0      | Ox. Sol. 3; Skin Irrit. 2; Eye                 |
| EC-No.                             | 231-786-5      | Irrit. 2; Resp. Sens. 1; Skin                  |
| Index-No.                          | 016-060-00-6   | Sens. 1; Acute Tox. 4; STOT                    |
|                                    |                | SE 3; H319, H315, H272, H302, H317, H334, H335 |

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

| Component                          | Classification | Concentration                  |
|------------------------------------|----------------|--------------------------------|
| <b>Diammonium peroxodisulphate</b> |                |                                |
| CAS-No.                            | 7727-54-0      | O, Xn, R 8 - R22 - R36/37/38 - |
| EC-No.                             | 231-786-5      | R42/43                         |
| Index-No.                          | 016-060-00-6   |                                |

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**

Wash off with soap and plenty of water. 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**

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 (NO<sub>x</sub>), Sulphur oxides

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

Use water spray to cool unopened containers.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. 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**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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 formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.  
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.

**7.3 Specific end use(s)**

A part 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

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

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.

##### 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 particle respirator type N100 (US) or type P3 (EN 143) 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. 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: powder<br>Colour: white |
| b) Odour                                        | no data available             |
| c) Odour Threshold                              | no data available             |
| d) pH                                           | 1,0 - 2 at 228 g/l at 25 °C   |
| 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                         | 7,88 - (Air = 1.0)                                                       |
| m) | Relative density                       | 1,980 g/cm <sup>3</sup>                                                  |
| n) | Water solubility                       | soluble                                                                  |
| 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                   | The substance or mixture is classified as oxidizing with the category 3. |

## 9.2 Other safety information

|                         |                       |
|-------------------------|-----------------------|
| Bulk density            | 900 kg/m <sup>3</sup> |
| Relative vapour density | 7,88 - (Air = 1.0)    |

## 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

Strong reducing agents, Organic materials, Powdered metals

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 689 mg/kg

LD50 Dermal - rat - 2.000 mg/kg

#### Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation

#### Serious eye damage/eye irritation

Eyes - rabbit

Result: No eye irritation

#### Respiratory or skin sensitisation

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

May cause respiratory irritation.

**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.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Toxicity to fish                      LC50 - Oncorhynchus mykiss (rainbow trout) - 76 mg/l - 96 h

Toxicity to daphnia and      EC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h  
other aquatic  
invertebrates

**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**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

Harmful to aquatic life.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: 1444

IMDG: 1444

IATA: 1444

**14.2 UN proper shipping name**

ADR/RID: AMMONIUM PERSULPHATE

IMDG: AMMONIUM PERSULPHATE

IATA: Ammonium persulphate

**14.3 Transport hazard class(es)**

ADR/RID: 5.1

IMDG: 5.1

IATA: 5.1

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**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**

no data available

**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                                                             |
| Eye Irrit.  | Eye irritation                                                             |
| H272        | May intensify fire; oxidiser.                                              |
| H302        | Harmful if swallowed.                                                      |
| H315        | Causes skin irritation.                                                    |
| H317        | May cause an allergic skin reaction.                                       |
| H319        | Causes serious eye irritation.                                             |
| H334        | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335        | May cause respiratory irritation.                                          |
| Ox. Sol.    | Oxidizing solids                                                           |
| Resp. Sens. | Respiratory sensitisation                                                  |
| Skin Irrit. | Skin irritation                                                            |

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

|           |                                                         |
|-----------|---------------------------------------------------------|
| O         | Oxidising                                               |
| Xn        | Harmful                                                 |
| R 8       | Contact with combustible material may cause fire.       |
| R22       | Harmful if swallowed.                                   |
| R36/37/38 | Irritating to eyes, respiratory system and skin.        |
| R42/43    | May cause sensitisation by inhalation and skin contact. |