



# Ammonium Persulphate CAS No 7727-54-0

# 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 : Central Drug House (P) Ltd

7/28 Vardaan House Ansari Road Daryaganj New Delhi-110002

INDIA

Telephone : +91 11 49404040

Email : <u>care@cdhfinechemical.com</u>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [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





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

Diammonium peroxodisulphate

CAS-No. 7727-54-0 Ox. Sol. 3; Skin Irrit. 2; Eye <= 100 %

EC-No. 231-786-5 Irrit. 2; Resp. Sens. 1; Skin Index-No. 016-060-00-6 Sens. 1; Acute Tox. 4; STOT SF 3: H319 H315 H272

SE 3; H319, H315, H272, H302, H317, H334, H335

Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Diammonium peroxodisulphate

CAS-No. 7727-54-0 O, Xn, R 8 - R22 - R36/37/38 - <= 100 %

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 (NOx), 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

Colour: white

b) Odour no data availablec) 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) Evapouration 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

I) Vapour density 7,88 - (Air = 1.0)

m) Relative density 1,980 g/cm3

n) Water solubility soluble

o) Partition coefficient: n-

octanol/water

no data available

p) Auto-ignition no data available

temperature

q) Decomposition no data available

temperature

r) Viscosity no data availables) 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/m3

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 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.

## **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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.