# **Ammonium Perchlorate**



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

#### 1.1 Product identifier

Product name: Ammonium Perchlorate

CAS Number: 7790-98-9

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

Identified use: Laboratory chemicals, Manufacture of substances

# 1.3 Details of the supplier of the safety data sheet

Company name: East Harbour Group Ltd

20 Clough Road, Severalls Industrial Park

Colchester, Essex, CO4 9QS

United Kingdom

**Telephone:** +44 (0) 333 242 0100

Email: info@eastharbourgroup.com

1.4 Emergency telephone number

Emergency telephone: 0800 246 1274

# Section 2: Hazardous identification

#### 2.1 Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Oxidizing liquids (Category 3), H272

Eye irritation (Category 2), H319

Specific target organ toxicity - repeated exposure (Category 2), H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 Label elements



# **Ammonium Perchlorate**



#### **Hazard Statements**

H272 May intensify fire; oxidizer.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

# **Precautionary Statements**

P220 Keep/Store away from clothing/ combustible materials.

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

Formula : H4CINO4
Molecular weight : 117.49 g/mol

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

Component Classification Concentration

**Ammonium perchlorate** 

CAS-No. 7790-98-9 Expl. 1.1; Ox. Sol. 1; Eye Irrit. >= 10 - < 20 %

EC-No. 232-235-1 2; STOT RE 2; H201, H271, Index-No. 017-009-00-0 H319, H373

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

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.

# **Ammonium Perchlorate**



## 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: Fire-fighting measures

#### 5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

#### Section 6: Accidental release measures

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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.

# 6.3 Methods and material for containment and cleaning up

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).

#### 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 inhalation of vapour or mist.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Oxidizing hazardous materials

# **Ammonium Perchlorate**



#### 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

#### **Exposure limits**

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.

#### **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 (EN14387) 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.

# Section 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance Form: clear, liquid Colour: colourless
Odor No data available
Odor Threshold No data available
pH No data available

Melting point/freezing point

Initial boiling point and boiling range

Flash Point

No data available

No data available

No data available

Evaporation Rate No data available

# **Ammonium Perchlorate**



Flammability (solid, gas)

Upper/lower flammability or explosive limits

Vapor Pressure Vapor Density Relative Density Water Solubility

Partition Coefficient: noctanol/water

Auto-ignition temperature Decomposition temperature

**Viscosity** 

Explosive properties Oxidizing properties

9.2 Other Safety Information

No data available

No data available
No data available
No data available
No data available
1.055 g/cm3
No data available

The substance or mixture is classified as oxidizing

with the category 3.

No data available

# Section 10: Stability and Reactivity

10.1 Reactivity

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** Organic materials, Powdered metals

**10.6 Hazardous decomposition products** Hazardous decomposition products formed under fire

conditions

No data available

Nitrogen oxides (NOx), Hydrogen chloride gas Other decomposition products - No data available

In the event of fire: see section 5

#### **Section 11: Toxicological Information**

Information on toxicological effects Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available Respiratory or skin sensitisation: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: IARC: No component of this product 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: No data available Specific target organ toxicity – repeated exposure: No data available

Aspiration hazard: No data available

Additional information: RTECS: Not available

# **Ammonium Perchlorate**



#### **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

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.

#### 12.6 Other adverse effects

No data available

# Section 13: Disposal considerations

#### 13.1 Waste treatment methods

Burn in a chemical incinerator equipped with an afterburner and scrubber b 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: 3211 IMDG: 3211 IATA: 3211

# 14.2 UN proper shipping name

ADR/RID: PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S. IMDG: PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

IATA: Perchlorates, inorganic, aqueous solution, n.o.s.

# 14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

# **Ammonium Perchlorate**



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

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

# **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

H201	Explosive; mass explosion hazard.
H271	May cause fire or explosion; strong oxidizer.
H272	May intensify fire; oxidizer.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H332	Harmful if inhaled

#### **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. East Harbour Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.