



## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

Product name: **AMMONIUM DICHROMATE**

CAS-No.: **7789-09-5**

Product Number: **A65857**

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

Identified uses: Laboratory chemicals, Manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,  
UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

#### 1.4 Emergency telephone number

Emergency Phone #: **+44 (0)845 1200 506**

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]:** Oxidizing solids (Category 2); Carcinogenicity (Category 1B); Germ cell mutagenicity (Category 1B); Reproductive toxicity (Category 1B); Acute toxicity, Inhalation (Category 2); Acute toxicity, Oral (Category 3); Specific target organ toxicity - repeated exposure (Category 1); Acute toxicity, Dermal (Category 4); Skin corrosion (Category 1B); Respiratory sensitization (Category 1); Skin sensitization (Category 1); Acute aquatic toxicity (Category 1); Chronic aquatic toxicity (Category 1)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC:** Risk of explosion by shock, friction, fire or other sources of ignition. Contact with combustible material may cause fire. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause cancer. May impair fertility. May cause harm to the unborn child. May cause heritable genetic damage. Very toxic by inhalation. Toxic if swallowed. Toxic: danger of serious damage to health by prolonged exposure through inhalation. Causes burns. Harmful in contact with skin. May cause sensitization by inhalation and skin contact.

## 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008 [CLP]



Pictogram:

Signal word: DANGER

#### Hazard statement(s)

H272 May intensify fire; oxidiser.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H340 May cause genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statement(s)

P201 Obtain special instructions before use.

P220 Keep/Store away from clothing/ combustible materials.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284 Wear respiratory protection.

Supplemental Hazard Statements none

### According to European Directive 67/548/EEC as amended.

#### Hazard symbol(s)

#### R-phrase(s)

R45 May cause cancer.

R46 May cause heritable genetic damage.

R60 May impair fertility.

R61 May cause harm to the unborn child.

R21 Also harmful in contact with skin.  
R25 Also toxic if swallowed.  
R26 Also very toxic by inhalation.  
R48/23 Also toxic: danger of serious damage to health by prolonged exposure through inhalation.  
R 2 Risk of explosion by shock, friction, fire or other sources of ignition.  
R 8 Contact with combustible material may cause fire.  
R34 Causes burns.  
R42/43 May cause sensitization by inhalation and skin contact.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S53 Avoid exposure - obtain special instructions before use.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets Restricted to professional users.

**2.3 Other hazards** – none

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

**Ammonium dichromate** (Synonyms: Ammonium bichromate; Ammonium pyrochromate; Ammonium Dichromate(VI))

Formula:  **$(\text{NH}_4)_2\text{Cr}_2\text{O}_7$**

Molecular Weight: **252.06g/mol**

Component Concentration: -

CAS-No.: **7789-09-5**

EC-No.: **232-143-1**

## 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.

#### **In case of skin contact:**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital.

#### **In case of eye contact:**

Rinse thoroughly with plenty of water for at least 15 minutes.

#### **If swallowed:**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 4.3 *Indication of immediate medical attention and special treatment needed*

no data available

## 5. FIRE-FIGHTING 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>), Chromium oxides

### 5.3 *Precautions for fire-fighters*

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 *Further information*

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### **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.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Do not grind or subject to friction or shock. Isolated storage is required.

### **7.3 Specific end uses**

no data available

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **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).



## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - rat - 53 mg/kg; LC50 Inhalation - rat - 4 h - 160 ppm

#### **Skin corrosion/irritation**

no data available

#### **Serious eye damage/eye irritation**

Eyes - rabbit - Severe eye irritation - Draize Test

#### **Respiratory or skin sensitization**

May cause allergic respiratory and skin reactions

#### **Germ cell mutagenicity**

May alter genetic material. In vivo tests showed mutagenic effects

#### **Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen 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**

May cause congenital malformation in the foetus. Presumed human reproductive toxicant May cause reproductive disorders.

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

no data available

#### **Potential health effects**

**Inhalation** May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion** Toxic if swallowed. Causes burns.

**Skin** Toxic if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

#### **Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

RTECS: Not available



## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish LC0 - *Leuciscus idus* (Golden orfe) - 50 mg/L - 48 h

### **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**

no data available

### **12.6 Other adverse effects**

Very toxic to aquatic life with long lasting effects.

## **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. Contact a licensed professional waste disposal service to dispose of this material.

#### **Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN-Number

ADR/RID: 1439 IMDG: 1439 IATA: 1439

### 14.2 UN proper shipping name

ADR/RID: AMMONIUM DICHROMATE

IMDG: AMMONIUM DICHROMATE

IATA: AMMONIUM DICHROMATE

### 14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

### 14.5 Environmental hazards

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

### 14.6 Special precautions for users

no data available

## 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

no data available

## 16. OTHER INFORMATION

no data available