

## MATERIAL SAFETY DATA SHEET (MSDS)

### AMMONIUM DICHROMATE AR

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : AMMONIUM DICHROMATE AR

Product code : A0024400500

Identification of the product : AMMONIUM DICHROMATE 99%  
CAS No :7789-09-5  
EC No :232-143-1

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

Use : Industrial. For professional use only.

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

Company identification : SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

##### Classification EC 67/548 or EC 1999/45

Classification : T+; R26  
T; R23  
Xn; R21  
C; R34  
Xn ; R42  
N; R50

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP : STOT RE 1) H372  
Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312  
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331  
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

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#### 2. Hazards identification -DSD (continued)

**Environmental hazards** : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP : Aquatic Acute 1) H400

#### 2.2. Label elements

#### Labelling EC 67/548 or EC 1999/45

#### Symbol(s)



#### Symbol(s)

: E : Explosive.  
T+ : Very toxic  
N : Dangerous for the environment

#### 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 : Harmful in contact with skin.  
R25 : Toxic if swallowed.  
R26 : Very toxic by inhalation.  
R34 : Causes burns.  
R42 : May cause sensitization by inhalation.  
R43 : May cause sensitization by skin contact.  
R48 : Danger of serious damage to health by prolonged exposure.  
R23 : Toxic by inhalation.  
R50 : Very toxic to aquatic organisms.  
R53 : 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 when 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.

#### Labelling Regulation EC 1272/2008 (CLP)

#### Hazard pictograms



#### Signal words

: Danger

#### Hazard statements

: H301 : Toxic if swallowed.  
H331 : Toxic if inhaled.  
H312 : Harmful in contact with skin.

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#### 2. Hazards identification -DSD (continued)

H372 : Causes damage to organs through prolonged or repeated exposure.  
 H400 : Very toxic to aquatic life.

##### Precautionary statements

- **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.  
 P271: Use only outdoors or in a well-ventilated area.  
 P260: Do not breathe dust, fume, gas, mist, vapours, spray.  
 P273: Avoid release to the environment.  
 P264: Wash thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.
- **Response** : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.  
 P302+P352: IF ON SKIN : Wash with plenty of soap and water.  
 P391: Collect spillage.  
 P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P363: Wash contaminated clothing before reuse.  
 P314: Get medical advice if you feel unwell.
- **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.  
 P405: Store locked up.
- **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
 P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : AMMONIUM DICHROMATE 99%  
 CAS No :7789-09-5  
 EC No :232-143-1  
 Substance.

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Assure fresh air breathing. Allow the victim to rest. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.

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#### 4. First aid measures (continued)

- Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse.
- Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- Ingestion** : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

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

- Symptoms relating to use** : Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes damage to organs through prolonged or repeated exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

- General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media** : Do not use a heavy water stream.
- Surrounding fires** : Use water spray or fog for cooling exposed containers.

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

- Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

##### 5.3. Advice for fire-fighters

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

#### 6. Accidental release measures

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

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#### 6. Accidental release measures (continued)

**For emergency responders** : Equip cleanup crew with proper protection.  
Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

#### 6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

**Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust.  
Store away from other materials.

#### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

#### 7. Handling and storage

##### 7.1. Precautions for safe handling

**Handling** : Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

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

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

##### 7.3. Specific end use(s)

**Specific end use(s)** : None.

#### 8. Exposure controls/personal protection

##### 8.1. Exposure controls

**Personal protection** : Avoid all unnecessary exposure.

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**8. Exposure controls/personal protection (continued)**

- **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.
- **Hand protection** : Wear protective gloves.
- **Eye protection** : Chemical goggles or safety glasses.
- **Others** : When using, do not eat, drink or smoke.

**8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Physical state at 20 °C</b>	: Solid.
<b>Colour</b>	: Orange to red
<b>Odour</b>	: Odorless
<b>Odour threshold</b>	: No data available.
<b>pH value</b>	: Not applicable.
<b>Melting point [°C]</b>	: 170 °C
<b>Decomposition point [°C]</b>	: 170 °C
<b>Critical temperature [°C]</b>	: N/A
<b>Auto-ignition temperature [°C]</b>	: 2180C
<b>Flammability (solid, gas)</b>	: N/A
<b>Flash point [°C]</b>	: N/A
<b>Boiling point [°C]</b>	: N/A
<b>Initial boiling point [°C]</b>	: N/A
<b>Final boiling point [°C]</b>	: N/A
<b>Evaporation rate</b>	: N/A
<b>Vapour pressure [20°C]</b>	: N/A
<b>Vapour pressure mm/Hg</b>	: N/A
<b>Vapour density</b>	: N/A
<b>Density [g/cm<sup>3</sup>]</b>	: 2,15
<b>Relative density, gas (air=1)</b>	: N/A
<b>Relative density, liquid (water=1)</b>	: N/A
<b>Solubility in water [% weight]</b>	: 360 g/l (20°C)
<b>Solubility in water</b>	: N/A
<b>Log Pow octanol / water at 20°C</b>	: No data available.
<b>Solubility</b>	: 3 - 4
<b>Viscosity at 40°C [mm<sup>2</sup>/s]</b>	: N/A

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**9. Physical and chemical properties (continued)**
**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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**10.5. Incompatible materials**

Materials to avoid	: Strong acids. Strong bases.
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**10.6. Hazardous decomposition products**

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.
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**11. Toxicological information**
**11.1. Information on toxicological effects**

Acute toxicity	
• Inhalation	: Toxic if inhaled.
• Dermal	: Harmful in contact with skin.
• Ingestion	: Toxic if swallowed.
Corrosion	: Based on available data, the classification criteria are not met.



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**11. Toxicological information (continued)**

<b>Irritation</b>	: Based on available data, the classification criteria are not met.
<b>Sensitization</b>	: Based on available data, the classification criteria are not met.
<b>Mutagenicity</b>	: Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	: Based on available data, the classification criteria are not met.
<b>Toxic for reproduction</b>	: Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	: Based on available data, the classification criteria are not met.
<b>STOT-repeated exposure</b>	: Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	: Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Very toxic to aquatic life.

**12.2. Persistence - degradability**

**Persistence - degradability** : Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**

**Mobility in soil** : Not established.

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.



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**13. Disposal considerations (continued)**

Special precautions : Hazardous waste due to toxicity.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

Proper shipping name : AMMONIUM DICHROMATE  
 UN N° : 1439  
 H.I. nr : 50  
 ADR - Class : 5.1  
 Labelling - Transport : 5.1 : Oxidizing substances.



ADR - Classification code : O2  
 O2  
 O2  
 O2  
 ADR - Group : II  
 ADR - Packing instructions : P002  
 ADR - Limited Quantity : 1 KG  
 ADR - Tunnel code : E : Passage forbidden through tunnels of category E.


**14.2. Sea transport (IMDG) [English only]**

Proper shipping name : AMMONIUM DICHROMATE  
 UN N° : 1439  
 IMO-IMDG - Class or division : 5.1 : Oxidizing substances.  
 IMO-IMDG - Packing group : II  
 IMO-IMDG - Packing instructions : P002  
 IMO-IMDG - Limited quantities : 1 kg  
 IMO-IMDG - Marine pollution : Yes  
 EMS-Nr : F-H S-Q

**14.3. Air transport (ICAO-IATA) [English only]**

**MATERIAL SAFETY DATA SHEET (MSDS)**
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**14. Transport information (continued)**

Proper shipping name	: AMMONIUM DICHROMATE
UN N°	: 1439
IATA - Class or division	: 5.1 : Oxidizing substances.
IATA - Packing group	: II
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 558
- Passenger and Cargo - Maximum Quantity/Packing	: 5 kg
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 562
- Cargo only - Maximum Quantity/Packing	: 25 kg
IATA - Limited Quantities	: 2.5 kg
ERG-Nr	: 5L

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment	: It has not been carried out.
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**16. Other information**

Revision	: Revision - See : *
Abbreviations and acronyms	: PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative
Sources of key data used	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Further information	: None.

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In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**