



## Safety Data Sheet

Date of Issue: 19.11.2024

Date of Expiry: 19.11.2029

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Company Name** : ECP Limited  
**Address** : PO Box 34125, Birkenhead, Auckland 0746  
**Telephone** : +64 9 480 4386  
**Facsimile** : +64 9 480 4385  
**Emergency phone number** : 0800 243 622 (24 hours)

<b>Product Name</b>	<b>Ammonium Dichromate</b>
<b>Product Code</b>	12301
<b>CAS No.</b>	7789-09-5

**Recommended use** : Laboratory Investigations

### 2: Hazard's identification

#### 2.1 GHS Classification

Oxidizing solids (Category 2), H272  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 2), H330  
Acute toxicity, Dermal (Category 4), H312  
Skin corrosion/irritation (Category 1C), H314  
Serious eye damage/eye irritation (Category 1), H318  
Respiratory sensitization (Category 1), H334  
Skin sensitization (Category 1), H317  
Germ cell mutagenicity (Category 1), H340  
Carcinogenicity (Category 1), H350  
Reproductive toxicity (Category 1), H360  
Specific target organ toxicity - single exposure, Oral (Category 1), H370  
Specific target organ toxicity - repeated exposure (Category 1), H372  
Hazardous to the aquatic environment - acute hazard (Category 1), H400  
Hazardous to the aquatic environment - chronic hazard (Category 1), H410

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



**Signal Word** : **Danger**

##### Hazard Statements

H272 May intensify fire; oxidizer.  
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.  
 H370 Causes damage to organs if swallowed.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H410 Very toxic to aquatic life with long lasting effects.

### Precautionary Statements

#### Prevention

- P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P220 Keep away from clothing and other combustible materials.  
 P260 Do not breathe dust.  
 P264 Wash skin thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response

- P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.  
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.  
 P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
 P391 Collect spillage.

#### Storage

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.

#### Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

\*Restricted to professional users.

## 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	:	Ammonium bichromate
Formula	:	(NH <sub>4</sub> ) <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>
Molecular weight	:	252.06 g/mol
CAS-No.	:	7789-09-5
EC-No.	:	232-143-1
Index-No.	:	024-003-00-1

## 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

### 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

## 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

Nature of decomposition products not known.

Not combustible.

Avoid shock and friction.

Risk of dust explosion.

Ambient fire may liberate hazardous vapours.

Has a fire-promoting effect due to release of oxygen.

In the event of decomposition: danger of explosion!

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire

extinguishing water from contaminating surface water or the ground water system.

## 6: Accidental release measures

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

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

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

#### Storage conditions

Keep locked up or in an area accessible only to qualified or authorized persons. Tightly closed and away from sources of ignition and heat. Observe national regulations.

Do not grind or subject to friction or shock. Isolated storage is required.

#### Storage class

Storage class (TRGS 510): 4.1A: Other explosive hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Ammonium dichromate	7789-09-5	WES-TWA	A 0.00002 mg/m <sup>3</sup>	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
	Remarks		Skin sensitizer Respiratory sensitizer Known or presumed human carcinogen	

		Exposure can also be estimated by biological monitoring Skin absorption	
	WES- STEL	0.0005 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
		Skin sensitizer Respiratory sensitizer Known or presumed human carcinogen Exposure can also be estimated by biological monitoring Skin absorption	

### Biological occupational exposure limits

Component	CAS No.	Parameters	Value	Biological Specimen	Basis
Ammonium Dichromate	7789-09-5	Chromium	10 µg/l	Urine	New Zealand. Biological Exposure Indices
		Remarks	End of 8-hour exposure		
		Chromium	25 µg/l	Urine	New Zealand. Biological Exposure Indices
		End of shift at end of workweek			

## 8.2 Exposure controls

### Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

#### 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 a full-face particle respirator type or 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.

## Control of environmental exposure

Do not let product enter drains.

### 9: Physical and chemical properties

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

a) Physical state	:	crystalline
b) Color	:	orange
c) Odor	:	odourless
d) Melting point/freezing point	:	
Melting point/range	:	170 °C
e) Initial boiling point and boiling range	:	No data available
f) Flammability (solid, gas)	:	No data available
g) Upper/lower flammability or explosive limits:	:	No data available
h) Flash point	:	Not applicable
i) Autoignition temperature	:	No data available
j) Decomposition temperature	:	No data available
k) pH	:	3.0 - 4.0 at 50 g/l at 25 °C
l) Viscosity	:	
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
m) Water solubility	:	360 g/l at 20 °C
n) Partition coefficient: n-octanol/water	:	Not applicable for inorganic substances
o) Vapor pressure	:	No data available
p) Density	:	2.150 g/cm <sup>3</sup> at 20 °C
Relative density	:	No data available
q) Relative vapor density	:	No data available
r) Particle characteristics	:	No data available
s) Explosive properties	:	No data available
t) Oxidizing properties	:	The substance or mixture is classified as oxidizing with the category 2.

### 10: Stability and reactivity

#### 10.1 Reactivity

Risk of dust explosion.

#### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Avoid shock and friction.

Heating.

#### 10.5 Incompatible materials

Strong reducing agents, Alcohols, Strong acids, Do not store near acids.

#### 10.6 Hazardous decomposition products

In the event of fire: see section 5

### 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

LD50 Oral - Rat - 53 mg/kg  
LC50 Inhalation - Rat - 4 h - 0.2 mg/l - dust/mist  
LD50 Dermal - Rabbit - 1,860 mg/kg

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

Remarks: Causes skin burns.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

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

Eyes - Rabbit

Result: Severe eye irritation

(Draize Test)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

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

May cause allergic respiratory and skin reactions Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### **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

#### **Reproductive toxicity**

May cause congenital malformation in the fetus. 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.

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### **Aspiration hazard**

No data available

### **11.2 Additional Information**

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

Ulceration, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **12: Ecological information**

### **12.1 Toxicity**

No data available

### **12.2 Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

### **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 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

Discharge into the environment must be avoided

## 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## 14: Transport Information Table

		<b>ADR/RID – European packaging certification</b>	<b>IMDG International Maritime Dangerous Goods Code</b>	<b>IATA – DGR International Air Travel Association – Dangerous Goods Regulations</b>
14.1	<b>UN Number</b>	1439	1439	1439
14.2	<b>UN Proper Shipping name</b>	AMMONIUM DICHROMATE	AMMONIUM DICHROMATE	Ammonium dichromate
14.3	<b>Transport Hazard Class</b>	5.1	5.1	5.1
14.4	<b>Packaging group</b>	II	II	II
14.5	<b>Environmental Hazards</b>	Yes	Yes	No
14.6	<b>Special precautions for user</b>	none		
14.7	<b>Incompatible materials</b>	Strong reducing agents, Alcohols, Strong acids, Do not store near acids.		

### Other regulations

Hazchem Code : 1Y

## 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulatory information

HSNO Approval Code: HSR001309

HSNO Group Standard Approval: not required

Tracking Required: not required

Approved Handler Cert.: not required



## 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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