

Section 1 Chemical Product and Company Identification

Page E1 of E2



**Aldon
Corporation**

221 Rochester Street
Avon, NY 14414
(585) 226-6177

**CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300**
For laboratory use only.
Not for drug, food or household use.

Product	AMMONIUM DICHROMATE
Synonyms	Ammonium Bichromate / Dichromic Acid, Diammonium Salt / Diammonium Dichromate(VI)

Section 2 Hazards Identification

Signal word: DANGER

Pictograms: GHS03 / GHS05 / GHS06 / GHS08 / GHS09

Target organs: Liver, Kidneys, Respiratory system



GHS Classification:

Oxidizing solid (Category 2)	Mutagenicity (Category 1B)
Acute toxicity, oral (Category 3)	Carcinogenicity (Category 1B)
Acute toxicity, dermal (Category 4)	Reproductive toxicity (Category 1B)
Skin corrosion (Category 1B)	STOT-RE (Category 1)
Skin sensitization (Category 1)	Aquatic acute (Category 1)
Acute toxicity, inhalation (Category 2)	Aquatic chronic (Category 1)
Respiratory sensitization (Category 1)	

GHS Label information: Hazard statement:

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.
H360FD: May damage fertility. May damage the unborn child.
H372: Causes damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220: Keep away from clothing/incompatible/combustible materials.
P221: Take any precaution to avoid mixing with combustibles and incompatible materials.
P260: Do not breathe dust.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P284: Wear respiratory protection.
P301+P310+P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth.
P331: Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P362+P364: Take off contaminated clothing and wash it before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical attention.
P391: Collect spillage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This chemical is known to the State of California to cause cancer or reproductive toxicity. [Chromium, hexavalent compounds]

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Ammonium dichromate	7789-09-5	100%	232-143-1

Section 4 First Aid Measures

INGESTION: TOXIC IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: FATAL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE DAMAGE. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: HARMFUL IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use water. Do not use dry chemicals or foams. CO₂ or Halon® may provide limited control.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. In contact with easily oxidizable materials, this chemical may react rapidly enough to cause ignition, violent combustion or explosion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Ammonium dichromate	Not established	Not established	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. Bright, red-orange crystals	Evaporation rate (Butyl acetate = 1): 7.7	Partition coefficient: Data not available
Odor: No odor	Flammability (solid/gas): Data not available	Auto-ignition temperature: Data not available
Odor threshold: Data not available	Explosion limits: Lower / Upper: Data not available	Decomposition temperature: Data not available
pH: Data not available	Vapor pressure (mm Hg): Data not available	Viscosity: Data not available
Melting / Freezing point: 170°C (338°F)	Vapor density (Air = 1): 8.7	Molecular formula: (NH ₄) ₂ Cr ₂ O ₇
Boiling point: Data not available	Relative density (Specific gravity): 2.15	Molecular weight: 252.06
Flash point: Data not available	Solubility(ies): Appreciable in water (>10%)	

Section 10 Stability & Reactivity

Chemical stability: Stable **Hazardous polymerization:** Will not occur.

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Strong oxidizers, reducing agents, combustible materials, organic materials.

Hazardous decomposition products: Carbon oxides, nitrogen oxides, and ammonia.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 53.75 mg/kg ; Inhalation-rat LC50: 0.156 mg/L/4hours ; Dermal-rabbit LD50:1640 mg/kg

Skin corrosion/irritation: Data not available

Serious eye damage/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: Data not available

NTP: Known to be a human carcinogen.

IARC classified: Group 1: Carcinogenic to humans. [Chromium VI compounds]

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Ca Prop 65: This chemical is known to the State of California to cause cancer or reproductive toxicity. [Chromium, hexavalent compounds]

Reproductive toxicity: May cause reproductive disorders.

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects.

STOT-repeated exposure: Inhalation-rat: 1 mg/m³/2 H per day/1-6 months

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Repeated or prolonged inhalation may cause asthma or nasal ulceration. This may result in perforation of the nasal septum. Symptoms may include burning sensation, sore throat, cough, wheezing, labored breathing.

Ingestion: Corrosive on ingestion. Symptoms may include nausea, vomiting, abdominal pain, burning sensation, diarrhea, shock or collapse.

Skin: Repeated or prolonged contact may cause skin sensitization. Symptoms may include redness, pain, and burns.

Eyes: Contact causes redness, pain, blurred vision, and severe deep burns.

Signs and symptoms of exposure: Hexavalent chromium compounds in the form of chromates and dichromates have been found to be mutagenic in bacterial and mammalian cells, including those of the Chinese hamster. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: HX7650000

Section 12 Ecological Information

Toxicity to fish: Gambusia affinis (fish, fresh water), TLm = 136 mg/L/96 hours

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN1439

Shipping name: Ammonium dichromate

Hazard class: 5.1

Packing group: II

Reportable Quantity: 10 lbs (4.54 kg)

Marine pollutant: No

Exceptions: Limited quantity equal to or less than 1 Kg

2016 ERG Guide # 141

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Ammonium dichromate	Listed	10 lbs (4.54 kg)	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.