



Section 1 – Company Information

**Parchem - fine & specialty chemicals**  
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Collect Calls Accepted

Section 2 – Product Identification/ Information on Ingredients

PRODUCT NAME 1,4-Dihydroxyanthraquinone  
CAS NUMBER 81-64-1  
SYNONYM 1,4-dihydroxy-9, 10-anthracenedione, quinizarin  
FORMULA  $C_{14}H_8O_4$

PRODUCT	CAS NUMBER	% BY WEIGHT
1,4-Dihydroxyanthraquinone	81-64-1	100%

Section 3 – Hazards Identification

**Appearance:** brown crystalline powder.

**Caution!** May cause eye, skin, and respiratory tract irritation.

**Target Organs:** None known.

**Potential Health Effects:**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:** No information found.

Section 4 – First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.



**Ingestion:** Do not induce vomiting. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

#### Section 5 – Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 1; Instability: 0

#### Section 6 – Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

#### Section 7 – Handling & Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 – Exposure Controls & Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

##### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by



OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Section 9 – Physical & Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** Orange to red - brown

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** 1 mm Hg @ 197 deg C

**Vapor Density:** 8.3

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 450 deg C @ 760 mmHg

**Freezing/Melting Point:** 191 - 193 deg C (decom)

**Decomposition Temperature:** Not available.

**Solubility:** <1 g/L (20°C)

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>

**Molecular Weight:** 240.21

#### Section 10 – Stability & Reactivity Data

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

#### Section 11 – Toxicological Information



**RTECS#:**

**CAS#** 81-64-1: CB6600000

**LD50/LC50:**

CAS# 81-64-1:

Draize test, rabbit, eye: 500 mg/24H Mild;

Oral, rat: LD50 = >5 gm/kg;

Oral, rat: LD50 = 10 gm/kg;

**Carcinogenicity:**

CAS# 81-64-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

Section 12 – Ecological Information

Ecotoxicity: log Pow: 2.34 Biodegradation: 52% (dir. 84/449/EC, C.6)

Section 13 – Disposal Consideration

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

Section 14 – Transportation Data

**IATA**

No information available.

**IMO**

No information available.



**RID/ADR**

No information available.

Section 15 – Regulatory Information
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**US FEDERAL**

**TSCA**

CAS# 81-64-1 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 81-64-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.



**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

Not available.

**Risk Phrases:**

**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**

CAS# 81-64-1: 0

**Canada - DSL/NDSL**

CAS# 81-64-1 is listed on Canada's DSL List.

**Canada - WHMIS**

Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 81-64-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 – Other Information
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Disclaimer

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.