

# Material Safety Data Sheet

## Section 1. Product Identification and Use

**Product Name - Trade Name**      **194-575 ROYAL BLUE DYE**

**Supplier - Manufacturer**      **Chemcraft® International Inc.**  
155 Rose Glen Road North  
P.O. Box 458  
Port Hope, ON.  
Canada L1A 3Z3

**Telephone**      (905) 885-6388      **Fax**      (905) 885-5097

**In case of Emergency**      (905) 885-6388, (800) 263-7951

### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

**Code**      194-575

**Synonym**      ROYAL BLUE DYE

**Chemical Name**      Not applicable.

**Chemical Family**      Anthraquinone derivative. (Coloring material.)

**Chemical Formula**      Not applicable.

**Material Uses**      Coatings: Additives for surface coatings

**Product Identification Number (PIN)**      Not regulated.

## Section 2. Hazardous Ingredients

### Exposure limits

Name	CAS #	% by Weight	LC <sub>50</sub> /LD <sub>50</sub>	TLV/PEL
Propylene glycol monomethyl ether	107-98-2	50 - 70	ORAL (LD50): Acute: 5660 mg/kg [Rat.] DERMAL (LD50): Acute: 13000 mg/kg [Rabbit.]	<b>ACGIH (United States).</b> TWA: 100 ppm STEL: 150 ppm

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

## Section 3. Physical Data

**Physical State and Appearance**      Liquid. (Fluid liquid.)

**Color**      Blue. (Dark.)      **Odor**      Slight.      **Taste**      Not available.

**Molecular Weight**      Not applicable.

**pH (1% soln/water)**      6 [Acidic.]

**Boiling Point**      The lowest known value is 100°C (212°F) (Water). Weighted average: 115.77°C (240.4°F)

**Melting Point**      May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -74.9°C (-102.8°F)

**Critical Temperature**      Not available.

**Specific Gravity**      1 (Water = 1)

**Vapor Pressure**      The highest known value is 2.3 kPa (17.2 mm Hg) (at 20°C) (Water). Weighted average: 1.83 kPa (13.73 mm Hg) (at 20°C)

**Vapor Density**      The highest known value is 3.12 (Air = 1) (2-Propanol, 1-methoxy-). Weighted average: 2.67 (Air = 1)

**Volatility**      Not available.

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<b>Odor Threshold</b>	Not available.
<b>Water/Oil Dist. Coeff.</b>	The product is much more soluble in water.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	See solubility in water, methanol, diethyl ether.
<b>Solubility</b>	Soluble in cold water, hot water, methanol, diethyl ether. Insoluble in n-octanol.

## Section 4. Fire and Explosion Hazard

<b>The Product is:</b>	May be combustible at high temperature.
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Non-flammable in the presence of the following materials or conditions: heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use dry chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition it emits acrid smoke and irritating fumes. (2-Propanol, 1-methoxy-)
<b>Flash Points</b>	Closed cup: 103°C (217.4°F).
<b>Flammable Limits</b>	The greatest known range is Lower: 1.6% Upper: 13.8% (2-Propanol, 1-methoxy-)
<b>Auto-Ignition Temperature</b>	The lowest known value is 287°C (548.6°F) (2-Propanol, 1-methoxy-).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Explosion Hazards in Presence of Various Substances</b>	Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge. Non-explosive in the presence of the following materials or conditions: heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
<b>Special Remarks on Explosion Hazards</b>	Not available.

## Section 5. Reactivity Data

<b>Stability</b>	The product is stable.
<b>Decomposition products</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Reactive or incompatible with the following materials: oxidizing materials and alkalis. Non-reactive or compatible with the following materials: reducing materials, combustible materials, metals, acids and moisture.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Not available.
<b>Special Remarks on Corrosivity</b>	Not available.

## Section 6. Toxicological Properties

<b>Routes of Entry</b>	Dermal contact. Eye contact. Inhalation.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 5660 mg/kg [Rat.]. (2-Propanol, 1-methoxy-). Acute dermal toxicity (LD50): 13000 mg/kg [Rabbit.]. (2-Propanol, 1-methoxy-).
<b>Effects of Acute Exposure</b>	Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion. Non-corrosive to skin. Inflammation of the eye is characterized by redness, watering and itching.

<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified 4 (Probably not for humans.) by IARC [194-575 ROYAL BLUE DYE]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.
<b>Special Remarks on Toxicity to Animals</b>	LD50 Oral: >5000 mg/kg rat.
<b>Special Remarks on Chronic Effects on Humans</b>	Exposure can cause coughing, chest pains, difficulty in breathing. (2-Propanol, 1-methoxy-)
<b>Special Remarks on Other Toxic Effects on Humans</b>	Material is irritating to mucous membranes and upper respiratory tract. (2-Propanol, 1-methoxy-)
<b>Exposure Limits</b>	Not available.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.
<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Small Spill</b>	Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Absorb with an inert material and transfer the spilled material and absorbent to an appropriate waste disposal container. Finish cleaning by flushing the contaminated surface with water and allowing it to run to the foul sewer.
<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk. Evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.
<b>TDG Classification</b>	-
<b>PIN</b>	Not regulated. <b>PG:</b> -
<b>Special Provisions for Transport</b>	-
<b>Federal and State Regulations</b>	Pennsylvania RTK: 2-Propanol, 1-methoxy- Massachusetts RTK: 2-Propanol, 1-methoxy- New Jersey: 2-Propanol, 1-methoxy-
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
<b>Other Classifications</b>	<b>WHMIS (Canada)</b> <b>Class D-2B: Material causing other toxic effects (Toxic).</b> <b>HCS (U.S.A.)</b> Target organ effects

Hazardous Material Information System (U.S.A.)	Health Hazard	* 2
	Fire Hazard	1
	Reactivity	0
	Personal Protection	H
National Fire Protection Association (U.S.A.)	Health	2
	Fire Hazard	1
	Reactivity	0
	Specific Hazard	

## Section 8. First Aid Measures

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.
<b>Hazardous Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Hazardous Inhalation</b>	Not available.
<b>Ingestion</b>	Do not induce vomiting. Examine the lips and mouth to ascertain if the tissues are damaged, a possible indication that toxic material was ingested. The absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Hazardous Ingestion</b>	Not available.

## Section 9. Preparation Information

<b>References</b>	-Manufacturers Material Safety Data Sheets.
<b>Other Special Considerations</b>	Not available.
<b>Related Information</b>	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
<b>Preparation Information</b>	Validated by A. Davis on 12/21/2005. Verified by A. Davis. Printed 10/20/2007.
<b>Information Contact</b>	Prepared by the Health, Safety and Environment Department, Chemcraft International Inc., P.O. Box 458, 155, Rose Glen Road North, Port Hope, ON. Canada. Phone: 905 885-6388 Fax: 905 885-5097

### Notice to Reader

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