

**MATERIAL SAFETY DATA SHEET****COOMASSIE BLUE G-250**

PRODUCT CODE NUMBER(S): 3380-5

**PRODUCT IDENTIFICATION****Chemical Name and Synonyms:** Coomassie Blue G-250;  
Brilliant blue G250**Chemical Family:** Dyes, stains**Chemical Formula:**  $C_{47}H_{48}N_3O_7S_2Na$ **Product Use:** Laboratory reagent**Manufacturer's Name and Address:**Caledon Laboratories Ltd.  
40 Armstrong Avenue  
Georgetown, Ontario L7G 4R9**Telephone No:** (905) 877-0101**Fax No:** (905) 877-6666**Emergency Telephone No:** CANUTEC (613) 996-6666**HAZARDOUS INGREDIENTS OF MATERIALS**

| Ingredients             | %   | TLV Units       | CAS No.   |
|-------------------------|-----|-----------------|-----------|
| Coomassie<br>Blue G-250 | >95 | Not established | 6104-58-1 |

**PHYSICAL DATA****Physical State:** Solid**Odour and Appearance:** Dark purple crystalline powder**Odour Threshold (ppm):** Not available**Vapour Pressure (mm Hg):** Not available**Vapour Density (Air = 1):** Not available**Evaporation Rate:** Not available**Boiling Point (degrees C):** Not available**Melting Point (degrees C):** Not available**pH:** Not available**Specific Gravity:** Not available**Coefficient of Water/Oil distribution:** Not available**SHIPPING DESCRIPTION****UN:** Not regulated**T.D.G. Class:** Not regulated**Pkg. Group:** Not regulated**REACTIVITY DATA****Chemical Stability:** Stable**Incompatibility with other substances:** May react with  
strong oxidizing agents**Reactivity:** Avoid excessive heat, ignition sources, genera-  
tion of dust.**Hazardous Decomposition Products:**  $CO_x$ ,  $NO_x$ ,  $SO_x$ **FIRE AND EXPLOSION DATA****Flammability:** May be combustible if strongly heated. As  
with most organic compounds, fine dust dispersed in air inthe presence of an ignition source is a potential dust  
explosion hazard.**Extinguishing Media:** Use an extinguisher appropriate to  
the surrounding material which is burning. Use water as  
spray or fog to minimize dust, absorb heat, cool containers,  
and disperse vapours. Fight fire from upwind, from a safe  
distance. Firefighters should wear protective equipment, full  
face-piece positive-pressure self-contained breathing appa-  
ratus, and clothing sufficient to prevent inhalation of dust or  
fumes, and contact with skin and eyes.**Flash Point (Method Used):** Not available**Autoignition Temperature:** Not available**Upper Flammable Limit (% by volume):** Not available**Lower Flammable Limit (% by volume):** Not available**Hazardous Combustion Products:**  $CO_x$ ,  $NO_x$ ,  $SO_x$ **Sensitivity to Impact:** None identified**Sensitivity to Static discharge:** As with most organic pow-  
ders, mixtures of dust with air may be sensitive under  
certain conditions, when ignited by an electrostatic or other  
high-voltage spark, or other ignition source.**TOXICOLOGICAL PROPERTIES AND HEALTH DATA**To the best of our knowledge, the physical, chemical and  
toxicological properties of this substance have not yet been  
thoroughly investigated.**Toxicological Data:****LD<sub>50</sub>:** Not available**LC<sub>50</sub>:** Not available**Effects of Acute Exposure to Product:****Inhaled:** May be mildly irritating to upper respiratory tract,  
causing sore throat, coughing, shortness of breath. Inhala-  
tion of large amounts may be harmful.**In contact with skin:** Dust may cause mechanical skin irri-  
tation. Concentrated solutions may be irritating, causing  
redness, itching, temporary pain. Probably not absorbed  
through skin. May cause staining of skin.**In contact with eyes:** May cause temporary mechanical ir-  
ritation, with redness, tearing, itching and pain.**Ingested:** No information available. Ingestion of large  
amounts may cause gastrointestinal irritation, with nausea,  
vomiting, diarrhea.**Effects of Chronic Exposure to Product:****Carcinogenicity:** No information available**Teratogenicity:** No information available**Reproductive Effects:** No information available**Mutagenicity:** No information available**Synergistic Products:** None known

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**PREVENTIVE MEASURES**

**Engineering Controls:** Local exhaust recommended.

**Respiratory Protection:** Dust/mist mask. For conditions where dust or mist is present, to the maximum use specified by the respirator supplier, NIOSH approved half-face high-efficiency dust/mist filter respirator, or NIOSH approved full face-piece high-efficiency dust/mist filter respirator. Higher or unknown concentrations, or for fire or spill conditions, self-contained breathing apparatus, or full face-piece, positive-pressure supplied-air respirator.

**Eye Protection:** Chemical safety glasses. Do not wear contact lenses when working with chemicals.

**Skin Protection:** Wear protective gloves and clean body-covering clothing, long-sleeved shirt, trousers, apron or lab coat.

**Other Personal Protective Equipment:** Safety shower and eye-wash fountain in work area.

**Leak and Spill Procedure:** Ventilate area of spill. Shut off all sources of ignition. Clean-up personnel should wear protective equipment and clothing sufficient to prevent inhalation of dusts or vapours and contact with skin and eyes. Gather up in a manner that does not raise dust (wet if necessary) and place in suitable containers for reclamation or disposal. Flush site of spill thoroughly with copious amounts of water.

**Waste Disposal:** Follow all federal, provincial and local regulations for disposal.

**Handling Procedures and Equipment:** COMBUSTIBLE DUST. Workers using this chemical must be properly trained in its hazards and its safe use, and must wear appropriate protective equipment and clothing. Avoid generating dust. If there is dust, keep away from heat, sparks, and all sources of ignition; avoid the accumulation of static charge, use anti-sparking tools and ground and bond equipment and containers. Use the smallest amount possible for the purpose, in a designated area with adequate ventilation. Use good housekeeping to prevent accumulations of dust. Avoid contact with skin and eyes. Avoid inhalation. Wash thoroughly after handling.

**Storage Requirements:** Store in suitable, labelled containers, in a cool, dry, well ventilated area, away from sources of ignition. Keep containers tightly closed when not in use and when empty. Protect from damage.

**FIRST AID MEASURES****Specific Measures:**

**Eyes:** Flush eyes thoroughly with gently running water, holding eyelids open while flushing, for five to ten (5-10) minutes, or until no trace of chemical remains. Get medical attention if irritation develops.

**Skin:** Remove contaminated clothing. Brush or wipe off dry material. Flush skin with plenty of running water until no evidence of chemical remains. Get medical attention if irritation develops.

**Inhalation:** Remove to fresh air. Give oxygen and get medical attention for any breathing difficulty.

**Ingestion:** If victim is alert and NOT convulsing, rinse mouth, give several glasses of water to drink to dilute. If discomfort occurs, or if a large amount has been ingested, get medical attention.

**REFERENCES USED**

CCINFO disc

Sax, Lewis: *Hawley's Condensed Chemical Dictionary*, 11th ed., 1987

Suppliers' Material Safety Data Sheets

**ADDITIONAL INFORMATION**

**Date Issued:** March 4, 1999

**Revision:** January 2011

**MSDS:** 3380-5

**Proposed Whmis Designation:** Not controlled. Not required to be updated every three years (WHMIS 1992, B-40, Section 29,2).

Prepared by: Caledon Laboratories Ltd. (905) 877-0101  
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