# Victoria Blue R

### sc-216056

**Material Safety Data Sheet** 



Hazard Alert Code Key: EXTREME HIGH MODERATE LOW

### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **PRODUCT NAME**

Victoria Blue R

### STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

# NFPA FLAMM BILLTY HEALTH AZARD INST BLITY

### **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

### **EMERGENCY**:

ChemWatch

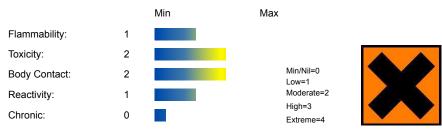
Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### **SYNONYMS**

C29-H32-Cl-N3, "C.I. 44040", "N, N' -(N, N' -tetramethyl)-1-diaminodiphenylnaphthylaminomethane", hydrochloride, "methanaminium, N-(4-((4-(dimethylamino)phenyl)(4-(ethylamino)-1-", "naphthalenyl)methylene)-2, 5-cyclohexadien-1-ylidene)-N-methyl-, chloride", "Aizen Victoria Blue BOH", "Basic Blue K", "Hidaco Victoria Blue R", "Victoria Blue RS", "Victoria Lake Blue R dye"

### **Section 2 - HAZARDS IDENTIFICATION**

### **CHEMWATCH HAZARD RATINGS**



### **CANADIAN WHMIS SYMBOLS**



## EMERGENCY OVERVIEW

Harmful if swallowed. Toxic to aquatic organisms.

### **POTENTIAL HEALTH EFFECTS**

### **ACUTE HEALTH EFFECTS**

### **SWALLOWED**

■ Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

### FYF

- Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).
- There is some evidence to suggest that this material can causeeye irritation and damage in some persons.
- Injury produced by cationic dyes range from conjunctival oedema, hyperaemia and purulent (pus) discharge to total opacification and necrosis and sloughing of the corneal stratum. The typical course, following exposure of

rabbit eyes to toxic quantities of cationic dyes, is an initial staining of the eye that persists even after attempts to wash it away. The stain disappears spontaneously within a day and the cornea becomes translucent, greyish and only slightly tinted. Opacity may increase, and the cornea may soften over the following 14 days, greatly bulging and weakened; sometimes necrosis occurs with sloughing. Permanent opacification from vascularisation and scarring occurs in most cases.

### SKIN

■ Skin contact is not thought to produce harmful health effects (as classified using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions.

<\p>.

- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

### **INHALED**

- The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified using animal models). Nevertheless, adverse effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

### **CHRONIC HEALTH EFFECTS**

■ Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

 NAME
 CAS RN
 %

 C.I. Basic Blue 11
 2185-86-6
 >98

### **Section 4 - FIRST AID MEASURES**

### **SWALLOWED**

· IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. · Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

### **EYE**

■ If this product comes in contact with the eyes: · Wash out immediately with fresh running water. · Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

### SKIN

■ If skin or hair contact occurs: · Flush skin and hair with running water (and soap if available). · Seek medical attention in event of irritation.

### **INHALED**

· If dust is inhaled, remove from contaminated area. · Encourage patient to blow nose to ensure clear passage of breathing. · If irritation or discomfort persists seek medical attention.

### **NOTES TO PHYSICIAN**

• for poisons (where specific treatment regime is absent):

-----BASIC TREATMENT

\_\_\_\_\_

Treat symptomatically.

# Section 5 - FIRE FIGHTING MEASURES Vapour Pressure (mmHG): Negligible Upper Explosive Limit (%): Not available Specific Gravity (water=1): Not available Lower Explosive Limit (%): Not available

### **EXTINGUISHING MEDIA**

- · Foam.
- · Dry chemical powder.

### **FIRE FIGHTING**

- · Alert Emergency Responders and tell them location and nature of hazard.
- · Wear breathing apparatus plus protective gloves.

### GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- · Combustible solid which burns but propagates flame with difficulty.
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), hydrogen chloride, phosgene, nitrogen oxides (NOx), other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

May emit corrosive fumes.

### FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

### PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Particulate

### Section 6 - ACCIDENTAL RELEASE MEASURES

### MINOR SPILLS

- · Remove all ignition sources.
- · Clean up all spills immediately.
- · Avoid contact with skin and eyes.
- · Control personal contact by using protective equipment.
- · Use dry clean up procedures and avoid generating dust.
- · Place in a suitable, labelled container for waste disposal.

### **MAJOR SPILLS**

- Moderate hazard.
- · CAUTION: Advise personnel in area.
- · Alert Emergency Responders and tell them location and nature of hazard.

### Section 7 - HANDLING AND STORAGE

### PROCEDURE FOR HANDLING

- $\cdot$  Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of exposure occurs.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- Do NOT cut, drill, grind or weld such containers.
- · In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

### RECOMMENDED STORAGE METHODS

- · Polyethylene or polypropylene container.
- · Check all containers are clearly labelled and free from leaks.

<sup>·</sup> Establish a patent airway with suction where necessary.

<sup>·</sup> Watch for signs of respiratory insufficiency and assist ventilation as necessary.

### STORAGE REQUIREMENTS

- · Store in original containers.
- · Keep containers securely sealed.

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### **EXPOSURE CONTROLS**

Source	Material	TWA mg/m³	Notes
US - Oregon Permissible Exposure Limits (Z-3)	C.I. Basic Blue 11 (Inert or Nuisance Dust: Total dust)	10	(d)
US OSHA Permissible Exposure Levels (PELs) - Table Z3	C.I. Basic Blue 11 (Inert or Nuisance Dust: (d) Respirable fraction)	5	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	C.I. Basic Blue 11 (Inert or Nuisance Dust: (d) Total dust)	15	
US - Hawaii Air Contaminant Limits	C.I. Basic Blue 11 (Particulates not other wise regulated - Total dust)	10	
US - Hawaii Air Contaminant Limits	C.I. Basic Blue 11 (Particulates not other wise regulated - Respirable fraction)	5	
US - Oregon Permissible Exposure Limits (Z-3)	C.I. Basic Blue 11 (Inert or Nuisance Dust: Respirable fraction)	5	(d)
US ACGIH Threshold Limit Values (TLV)	C.I. Basic Blue 11 (Particles (Insoluble or Poorly Soluble) [NOS] Inhalable particles)	10	See Appendix B current TLV/BEI Book
US - California Permissible Exposure Limits for Chemical Contaminants	C.I. Basic Blue 11 (Particulates not otherwise regulated Respirable fraction)	5	(n)
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	C.I. Basic Blue 11 (Particulates not otherwise regulated Respirable fraction)	5	
US - Michigan Exposure Limits for Air Contaminants	C.I. Basic Blue 11 (Particulates not otherwise regulated, Respirable dust)	5	
Canada - Prince Edward Island Occupational Exposure Limits	C.I. Basic Blue 11 (Particles (Insoluble or Poorly Soluble) [NOS] Inhalable particles)	10	See Appendix B current TLV/BEI Book
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants ENDOELTABLE	C.I. Basic Blue 11 (Particulates not otherwise regulated (PNOR)(f)-Respirable fraction)	5	

### **PERSONAL PROTECTION**









### **RESPIRATOR**

Particulate

Consult your EHS staff for recommendations

- $\cdot$  Safety glasses with side shields.
- · Chemical goggles.

### HANDS/FEET

- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- · frequency and duration of contact,
- · chemical resistance of glove material,
- · glove thickness and
- · dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

· When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.

- · When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.
- · Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- · polychloroprene
- · nitrile rubber
- · butyl rubber
- · fluorocaoutchouc
- · polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

### **OTHER**

- · Overalls.
- · P.V.C. apron.
- · Barrier cream.
- · Skin cleansing cream.
- · Eye wash unit.

### **ENGINEERING CONTROLS**

- · Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### **PHYSICAL PROPERTIES**

Solid.

Does not mix with water.

State	Divided solid	Molecular Weight	458.05
Melting Range (°F)	Not available	Viscosity	Not available
Boiling Range (°F)	Not applicable	Solubility in water (g/L)	Partly miscible
Flash Point (°F)	Not available	pH (1% solution)	Not applicable
Decomposition Temp (°F)	Not available	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not available	Specific Gravity (water=1)	Not available
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	Not applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not applicable

### **APPEARANCE**

Dark-blue powder; does not mix well with water.

### **Section 10 - CHEMICAL STABILITY**

### **CONDITIONS CONTRIBUTING TO INSTABILITY**

- · Presence of incompatible materials.
- · Product is considered stable.

### STORAGE INCOMPATIBILITY

■ Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

### Section 11 - TOXICOLOGICAL INFORMATION

C.I. BASIC BLUE 11

### **TOXICITY AND IRRITATION**

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY IRRITATION
Oral (rat) LD50: 960 mg/kg Nil Reported

Subcutaneous (mouse) LD50: 1408 mg/kg

Carcinogenic by RTECS criteria.

### Section 12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms.

**Ecotoxicity** 

Ingredient Persistence: Water/Soil Persistence: Air Bioaccumulation Mobility C.I. Basic Blue 11 HIGH LOW LOW

### Section 13 - DISPOSAL CONSIDERATIONS

### **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

! Puncture containers to prevent re-use and bury at an authorized landfill.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- · Reuse
- Recycling
- · Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- · Recycle wherever possible.
- · Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

### **Section 14 - TRANSPORTATION INFORMATION**

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

### **Section 15 - REGULATORY INFORMATION**



### **REGULATIONS**

### C.I. Basic Blue 11 (CAS: 2185-86-6) is found on the following regulatory lists;

"Canada Non-Domestic Substances List (NDSL)", "US Toxic Substances Control Act (TSCA) - Inventory"

### **Section 16 - OTHER INFORMATION**

### LIMITED EVIDENCE

- May produce discomfort of the eyes\*.
- \* (limited evidence).

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