



## Direct Blue 15: sc-214908

## MATERIAL SAFETY DATA SHEET

The Power to Question

**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

Product Name: Direct Blue 15  
 Catalog Number: sc-214908  
 Supplier: Santa Cruz Biotechnology, Inc.  
 2145 Delaware Ave.  
 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

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT**

Substance Name: Direct Blue 15  
 CAS Number: 2429-74-5  
 SARA 313: No  
 Formula:  $C_{34}H_{24}N_6O_{16}S_4Na_4$   
 Molecular Weight: 992.80  
 RTECS Number: QJ6420000

Synonyms Airedale Blue D; Aizen Direct Sky Blue 5B; Aizen Direct Sky Blue 5BH; Amanil Sky Blue; Atlantic Sky Blue A; Atul Direct Sky Blue; Azine Sky Blue 5B; Belamine Sky Blue A; Benzamil Sky Blue; Benzo Sky Blue S; Benzo Sky Blue A-CF; Cartasol Blue 2GF; Chloramine Sky Blue A; Chloramine Sky Blue 4B; Chrome Leather Pure Blue; C.I. 24400; C.I. Direct Blue 15; C.I. Direct Blue 15, tetrasodium salt; Cresotone Pure Blue; Diacotton Sky Blue 5B; Diamine Blue; Diamine Blue 6B; Diamine Sky Blue; Diamine Sky Blue Cl; Diaph-tamine Pure Blue; Diazol Pure Blue 4B; Diphenyl Brilliant Blue; Diphenyl Sky Blue 6B; Direct Blue 15; Direct Blue 10G; Direct Blue HH; Direct Pure Blue; Direct Pure Blue M; Direct Sky Blue A; Direct Sky Blue 5B; Enianil Pure Blue AN; Fenamin Sky Blue; Hispamin Sky Blue 3B; Kayafect Blue Y; Kayaku Di-rect Sky Blue 5B; Mitsui Direct Sky Blue 5B; Modr Prima 15 (Czech); Naph-tamine Blue 10G; NCI C61290; Niagara Blue 4B; Niagara Sky Blue; Nippon Direct Sky Blue; Nippon Sky Blue; Nitto Direct Sky Blue 5B; Oxamine Sky Blue 5B; Paper Blue S; Phenamine Sky Blue A; Pontamine Sky Blue 5BX; Pontacyl Sky Blue 4BX; Shikiso Direct Sky Blue 5B; Sky Blue 4B; Sky Blue 5B; Tertrodirect Blue F; Vondacel Blue HH;

**SECTION 3 - HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Harmful.  
 Limited evidence of a carcinogenic effect.  
 Possible Carcinogen (US). Target organ(s): Blood. Brain. Calif.  
 Prop. 65 carcinogen.

**HMIS RATING**

HEALTH: 0\*  
 FLAMMABILITY: 0  
 REACTIVITY: 0

**NFPA RATING**

HEALTH: 0  
 FLAMMABILITY: 0  
 REACTIVITY: 0

**SECTION 4 - FIRST AID MEASURES****ORAL EXPOSURE**

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**INHALATION EXPOSURE**

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

**DERMAL EXPOSURE**

In case of contact, immediately wash skin with soap and copious amounts of water.

**EYE EXPOSURE**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**SECTION 5 - FIRE FIGHTING MEASURES****FLASH POINT**

N/A

**AUTOIGNITION TEMP**

N/A

**FLAMMABILITY**

N/A

**EXTINGUISHING MEDIA**

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**FIREFIGHTING**

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
 Specific Hazard(s): Emits toxic fumes under fire conditions.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES****PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Evacuate area.

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

**METHODS FOR CLEANING UP**

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

**SECTION 7 - HANDLING AND STORAGE****HANDLING**

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

**STORAGE**

Suitable: Keep tightly closed.

## SECTION 8 - EXPOSURE CONTROLS / PPE

### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

## SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

Appearance	Physical State: Solid
pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

## SECTION 10 - STABILITY AND REACTIVITY

### STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## SECTION 11 - TOXICOLOGICAL INFORMATION

### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

### TARGET ORGAN(S) OR SYSTEM(S)

Blood. Brain.

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Species: Rat

Route of Application: Oral

Dose: 168 GM/KG

Exposure Time: 96W

Frequency: C

Result: Blood:Leukemia Brain and Coverings:Tumors.

Tumorigenic:Carcinogenic by RTECS criteria.

### IARC CARCINOGEN LIST

Rating: Group 2B

### NTP CARCINOGEN LIST

Rating: Clear evidence.

Species: Rat

Route: Drinking

### CHRONIC EXPOSURE - TERATOGEN

Species: Rat

Dose: 200 MG/KG

Route of Application: Intraperitoneal

Exposure Time: (8D PREG)

Result: Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Eye, ear.

Species: Rat

Dose: 140 MG/KG

Route of Application: Intraperitoneal

Exposure Time: (8D PREG)

Result: Effects on Embryo or Fetus: Other effects to embryo.

### CHRONIC EXPOSURE - MUTAGEN

Species: Mouse

Route: Oral

Dose: 2 GM/KG

Mutation test: DNA damage

### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat

Dose: 70 MG/KG

Route of Application: Intraperitoneal

Exposure Time: (8D PREG)

Result: Effects on Fertility: Post-implantation mortality

Species: Mouse

Dose: 5 GM/KG

Route of Application: Oral

Exposure Time: (8-12D PREG)

Result: Effects on Newborn: Other postnatal measures or effects.

## SECTION 12 - ECOLOGICAL INFORMATION

No data available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations. (DN)Requires special label: "Contains a substance which is regulated by Danish work environmental law due to the risk of carcinogenic properties."

## SECTION 14 - TRANSPORT INFORMATION

### DOT

Proper Shipping Name: None  
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

## SECTION 15 - REGULATORY INFORMATION

### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 40  
Risk Statements: Limited evidence of a carcinogenic effect.  
S: 36  
Safety Statements: Wear suitable protective clothing.

### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.  
Risk Statements: Limited evidence of a carcinogenic effect.  
Safety Statements: Wear suitable protective clothing.  
US Statements: Possible Carcinogen (US). Target organ(s): Blood.  
Brain. Calif. Prop. 65 carcinogen.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No  
TSCA INVENTORY ITEM: Yes

### UNITED STATES - STATE REGULATORY INFORMATION

#### CALIFORNIA PROP - 65

California Prop - 65: This product is or contains chemical(s) known to the state of California to cause cancer. This product is or contains chemical(s) known to the state of California to cause cancer.

### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

## SECTION 16 - OTHER INFORMATION

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

11/8/2010