

## SAFETY DATA SHEET

Creation Date 25-Sep-2009

Revision Date 24-Dec-2021

Revision Number 4

### 1. Identification

**Product Name** Brilliant Blue R  
**Cat No. :** BP101-25; BP101-50  
**CAS No** 6104-59-2  
**Synonyms** Coomassie<sup>®</sup>4 Brilliant Blue R-250; Acid Blue 83; C.I. 42660  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number** CHEMTREC<sup>®</sup>, Inside the USA: 800-424-9300  
CHEMTREC<sup>®</sup>, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust

Yes

#### Label Elements

**Signal Word**  
Warning

**Hazard Statements**  
May form combustible dust concentrations in air

#### **Precautionary Statements**

**Storage**  
Store in a well-ventilated place. Keep container tightly closed

**Hazards not otherwise classified (HNOC)**

None identified

**3. Composition/Information on Ingredients**

| Component                       | CAS No    | Weight % |
|---------------------------------|-----------|----------|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | 100      |

**4. First-aid measures**

|  |  |
|--|--|
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.              |
| <b>Skin Contact</b>                        | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. |
| <b>Inhalation</b>                          | Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.  |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Get medical attention.   |
| <b>Most important symptoms and effects</b> | No information available.  |
| <b>Notes to Physician</b>                  | Treat symptomatically  |

**5. Fire-fighting measures**

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>     | Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. |
| <b>Unsuitable Extinguishing Media</b>   | No information available   |
| <b>Flash Point</b>                      | No information available   |
| <b>Method -</b>                         | No information available   |
| <b>Autoignition Temperature</b>         | No information available   |
| <b>Explosion Limits</b>                 |  |
| <b>Upper</b>                            | No data available  |
| <b>Lower</b>                            | No data available  |
| <b>Sensitivity to Mechanical Impact</b> | No information available   |
| <b>Sensitivity to Static Discharge</b>  | No information available   |

**Specific Hazards Arising from the Chemical**

Fine dust dispersed in air may ignite.

**Hazardous Combustion Products**Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides.**Protective Equipment and Precautions for Firefighters**

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

**NFPA**Health  
1Flammability  
1Instability  
0Physical hazards  
N/A**6. Accidental release measures**

|                             |   |
|-----------------------------|---|
| <b>Personal Precautions</b> | Use personal protective equipment as required. Ensure adequate ventilation. |
|-----------------------------|---|

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Wash hands before breaks and immediately after handling the product. Minimize dust generation and accumulation.

**Storage.** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** None under normal use conditions.

### Personal Protective Equipment

**Eye/face Protection** 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 and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|   |                               |
|---|-------------------------------|
| <b>Physical State</b>                         | Powder Solid                  |
| <b>Appearance</b>                             | Red brown                     |
| <b>Odor</b>                                   | Odorless                      |
| <b>Odor Threshold</b>                         | No information available      |
| <b>pH</b>                                     | 6.2                           |
| <b>Melting Point/Range</b>                    | 174 - 180 °C / 345.2 - 356 °F |
| <b>Boiling Point/Range</b>                    | No information available      |
| <b>Flash Point</b>                            | No information available      |
| <b>Evaporation Rate</b>                       | Not applicable                |
| <b>Flammability (solid,gas)</b>               | No information available      |
| <b>Flammability or explosive limits</b>       |                               |
| <b>Upper</b>                                  | No data available             |
| <b>Lower</b>                                  | No data available             |
| <b>Vapor Pressure</b>                         | No information available      |
| <b>Vapor Density</b>                          | Not applicable                |
| <b>Specific Gravity</b>                       | 0.25                          |
| <b>Solubility</b>                             | slightly soluble              |
| <b>Partition coefficient; n-octanol/water</b> | No data available             |
| <b>Autoignition Temperature</b>               | No information available      |
| <b>Decomposition Temperature</b>              | No information available      |
| <b>Viscosity</b>                              | Not applicable                |
| <b>Molecular Formula</b>                      | C45 H44 N3 Na O7 S2           |
| <b>Molecular Weight</b>                       | 825.96                        |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | No  |
| <b>Stability</b>                        | Stable under normal conditions.   |
| <b>Conditions to Avoid</b>              | Incompatible products.  |
| <b>Incompatible Materials</b>           | Strong oxidizing agents   |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |
| <b>Hazardous Reactions</b>              | None under normal processing.   |

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

**Component Information**

**Toxicologically Synergistic** No information available

**Products**

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** May cause skin, eye, and respiratory tract irritation

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                       | CAS No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---------------------------------|-----------|------------|------------|------------|------------|------------|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability** May persist based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

### 15. Regulatory information

#### United States of America Inventory

| Component                       | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---------------------------------|-----------|------|---|-----------------------------|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | X    | ACTIVE  | -                           |

**Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component                       | CAS No    | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|---------------------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | X   | -    | 228-060-5 | X     | X    | X    | X    | X     | KE-06366 |

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

#### U.S. Federal Regulations

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know** Not applicable

**Regulations****U.S. Department of Transportation**

Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH****Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component                       | CAS No    | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---------------------------------|-----------|----------------|------------------------------|---------------------------|--|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

| Component                       | CAS No    | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---------------------------------|-----------|---|--|----------------------------|------------------------------------|
| Brilliant blue R (Acid blue 83) | 6104-59-2 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

## 16. Other information

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**