

SAFETY DATA SHEET

Creation Date 11-Mar-2010

Revision Date 23-May-2017

Revision Number 2

1. Identification Product Name Toluidine Blue O Cat No. : BP107-10

Cat No. :

BI 107-10

Synonyms

Basic Blue 17; C.I. 52040; Tolonium chloride Laboratory chemicals.

Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

<u>Company</u>

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

Recommended Use Uses advised against

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

Hazard Statements

Precautionary Statements Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---------|----------|
| Phenothiazin-5-ium, | 92-31-9 | >95 |
| 3-amino-7-(dimethylamino)-2-methyl-, chloride | | |

4. First-aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

| | medical attention if symptoms occur. |
|---|--|
| Skin Contact | Rinse with plenty of water. Get medical attention if symptoms occur. |
| Inhalation | Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain medical attention. |
| Ingestion | Do not induce vomiting. Call a physician or Poison Control Center immediately. |
| Most important symptoms/effects Notes to Physician | No information available. Treat symptomatically |
| | 5. Fire-fighting measures |

| Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
|--------------------------------|--|
| Unsuitable Extinguishing Media | No information available |
| Flash Point Method - | No information available No information available |
| Autoignition Temperature | |

| Aatolgindon remperature | |
|----------------------------------|--------------------------|
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |
| | |

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None known

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 0 | Flammability 1 | Instability 0 | Physical hazards N/A | | | |
|--|--|--|---------------------------------|--|--|--|
| | 6. Accidental re | elease measures | | | | |
| Personal Precautions | Use personal protective e Avoid contact with skin, e | quipment. Ensure adequate ver yes and clothing. | tilation. Avoid dust formation. | | | |
| Environmental Precautions | | onment. See Section 12 for add | itional ecological information. | | | |
| Methods for Containment and Cle Up | Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust Up formation. | | | | | |
| | 7. Handling | and storage | | | | |
| HandlingWear personal protective equipment. Ensure adequate ventilation. Avoid dust forma Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. | | | | | | |
| Storage Keep containers tightly closed in a dry, cool and well-ventilated place. | | | | | | |
| 8. | 8. Exposure controls / personal protection | | | | | |

| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. | | | | |
|-------------------------------|---|--|--|--|--|
| Engineering Measures | Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. | | | | |
| 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

| | 3 1 1 |
|--|--------------------------|
| Physical State | Solid |
| Appearance | Dark green |
| Odor | No information available |
| Odor Threshold | No information available |
| рН | No information available |
| Melting Point/Range | No data available |
| Boiling Point/Range | No information available |
| Flash Point | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | negligible |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | Soluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | C15 H16 CI N3 S |
| Molecular Weight | 305.82 |
| | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available |
|---------------------------------|---|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Avoid dust formation. Incompatible products. Excess heat. |
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Product | s None under normal use conditions |
| Hazardous Polymerization | Hazardous polymerization does not occur. |

| Hazardous Reactions | None under normal processing. | | | | | | |
|---|--|---------------------------|---------------------|-------------------|------------------|--|--|
| 11. Toxicological information | | | | | | | |
| Acute Toxicity | | | | | | | |
| Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as w | No information available s well as chronic effects from short and long-term exposure | | | | | | |
| Irritation | No information ava | ailable | | | | | |
| Sensitization | No information ava | ailable | | | | | |
| Carcinogenicity | The table below in | dicates whether ea | ach agency has list | ed any ingredient | as a carcinogen. | | |
| Component CAS-No | IARC | NTP | ACGIH | OSHA | Mexico | | |
| Phenothiazin-5-ium, 92-31-9 3-amino-7-(dimethyla mino)-2-methyl-, chloride | Not listed | Not listed | Not listed | Not listed | Not listed | | |
| Mutagenic Effects | No information available | | | | | | |
| Reproductive Effects | No information ava | ailable. | | | | | |
| Developmental Effects | No information ava | No information available. | | | | | |
| Teratogenicity | No information ava | ailable. | | | | | |
| STOT - single exposure STOT - repeated exposure | None known None known | | | | | | |
| Aspiration hazard | No information ava | ailable | | | | | |
| Symptoms / effects,both acute and delayed | No information ava | ailable | | | | | |
| Endocrine Disruptor Information | No information ava | ailable | | | | | |
| Other Adverse Effects | See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated. | | | | | | |
| | 12. Ecolo | ogical infor | mation | | | | |
| <u>Ecotoxicity</u> No information available. | cotoxicity | | | | | | |
| Persistence and Degradability | Soluble in water P | ersistence is unlike | ely based on inform | ation available. | | | |
| Bioaccumulation/ Accumulation | No information ava | ailable. | | | | | |
| Mobility | Will likely be mobile in the environment due to its water solubility. | | | | | | |

13. Disposal considerations

Waste Disposal MethodsChemical 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 | | | |
| DOT TDG IATA | Not regulated | | | |
| IATA | Not regulated | | | |
| IMDG/IMO | Not regulated | | | |
| 15. Regulatory information | | | | |

All of the components in the product are on the following Inventory lists: Australia Complete Regulatory Information contained in following SDS's X = listed China Canada The product is classified and labeled according to EC directives or corresponding national laws The product is classified and labeled in accordance with Directive 1999/45/EC Europe TSCA Korea Philippines

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Phenothiazin-5-ium, | Х | Х | - | 202-146-2 | - | | Х | - | Х | Х | Х |
| 3-amino-7-(dimethylamino)-2- | | | | | | | | | | | |
| methyl-, chloride | | | | | | | | | | | |

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

.. . .

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

| TSCA 12(b) | Not applicable | |
|---|--------------------------|------------------------------------|
| SARA 313 | Not applicable | |
| SARA 311/312 Hazard Categories Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pressure Ha Reactive Hazard | zard | No No No No |
| CWA (Clean Water Act) | Not applicable | |
| Clean Air Act | Not applicable | |
| OSHA Occupational Safety and Health Not applicable | n Administration | |
| CERCLA Not applicable | | |
| California Proposition 65 | This product does not co | ntain any Proposition 65 chemicals |
| U.S. State Right-to-Know Regulations | Not applicable | |

U.S. Department of Transportation

| Reportable Quantity (RQ): | Ν |
|-----------------------------|---|
| DOT Marine Pollutant | Ν |
| DOT Severe Marine Pollutant | Ν |

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

| Mexico - Grade | No information available |
|--|--|
| | 16. Other information |
| Prepared By | Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com |
| Creation Date Revision Date Print Date Revision Summary | 11-Mar-2010 23-May-2017 23-May-2017 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