

# Part of Thermo Fisher Scientific

## SAFETY DATA SHEET

| Creation Date 12-Dec-1997  | reation Date 12-Dec-1997 Revision Date 08-Aug-2014  |                  |  |  |  |
|--|---|------------------|--|--|--|
|  | 1. Identification   |                  |  |  |  |
| Product Name   | Safranine O   |                  |  |  |  |
| Cat No. :  | S670-25; S670-100   |                  |  |  |  |
| Synonyms   | 3,7-Diamino-2,8-dimethyl-5-phenylphenazinium chloride; Basic R  | ed 2; C.I. 50240 |  |  |  |
| Recommended Use  | Laboratory chemicals.   |                  |  |  |  |
| Uses advised against<br>Details of the supplier of the safety                  | No Information available<br><u>/ data sheet</u>   |                  |  |  |  |
| <b>Company</b><br>Fisher Scientific<br>One Reagent Lane<br>Fair Lawn, NJ 07410 | Emergency Telephone Number<br>CHEMTREC®, Inside the USA: 800-424-9300<br>CHEMTREC®, Outside the USA: 001-703-527-3887 |                  |  |  |  |

2. Hazard(s) identification

## Classification

Tel: (201) 796-7100

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

Skin Corrosion/irritation Serious Eye Damage/Eye Irritation Category 2 Category 2

## Label Elements

Signal Word Warning

#### Hazard Statements Causes skin irritation

Causes skin irritation Causes serious eye irritation



## Precautionary Statements

## Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

## Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

## Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

## Hazards not otherwise classified (HNOC)

None identified

## 3. Composition / information on ingredients

| Component   |   | CAS-No                             | Weight %         |  |  |  |
|---|---|------------------------------------|------------------|--|--|--|
| Phenazinium, 3,7-diamino-2,8-dimeth<br>chloride   | yl-5-phenyl-,   | 477-73-6                           | 95               |  |  |  |
|   | 4. [  | First-aid measures                 |                  |  |  |  |
| Eye Contact   | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>Obtain medical attention.   |                                    |                  |  |  |  |
| Skin Contact  | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.                                     |                                    |                  |  |  |  |
| Inhalation  | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention. |                                    |                  |  |  |  |
| Ingestion   | Do not induce vomiting. Clean mouth with water. Get medical attention.  |                                    |                  |  |  |  |
| Most important symptoms/effects<br>Notes to Physician   | No information available.<br>Treat symptomatically  |                                    |                  |  |  |  |
|   | 5. Fir  | e-fighting measures                |                  |  |  |  |
| Suitable Extinguishing Media  | Water spray.  | Carbon dioxide (CO2). Dry chemical | . chemical foam. |  |  |  |
| Unsuitable Extinguishing Media  | No information available  |                                    |                  |  |  |  |
| Flash Point<br>Method -   | Not applicable<br>No information available  |                                    |                  |  |  |  |
| Autoignition Temperature  | No information available  |                                    |                  |  |  |  |
| Explosion Limits<br>Upper<br>Lower<br>Sensitivity to Mechanical Impact<br>Sensitivity to Static Discharge | No data available<br>No data available<br>ct No information available<br>No information available   |                                    |                  |  |  |  |

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

## Hazardous Combustion Products

Hydrogen chloride gas Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2)

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<br>Health  | Flammability   | Instability                      | Physical hazards    |  |  |  |  |  |  |  |
|---|--|----------------------------------|---------------------|--|--|--|--|--|--|--|
| 2   | 1  | 0                                | N/A                 |  |  |  |  |  |  |  |
| 6. Accidental release measures                        |  |                                  |                     |  |  |  |  |  |  |  |
| Personal Precautions<br>Environmental Precautions     | Use personal protective equipment. Ensure adequate ventilation.<br>Should not be released into the environment.  |                                  |                     |  |  |  |  |  |  |  |
| Methods for Containment and Clea<br>Up                | <b>Clean</b> Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.  |                                  |                     |  |  |  |  |  |  |  |
|   | 7. Handling a  | 3                                |                     |  |  |  |  |  |  |  |
| Handling  | Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust. Wash hands before breaks and immediately after handling the product.   |                                  |                     |  |  |  |  |  |  |  |
| Storage   | Keep in a dry, cool and well   | -ventilated place. Keep contair  | ner tightly closed. |  |  |  |  |  |  |  |
| 8. E  | 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<br>Personal Protective Equipment | Ensure adequate ventilatior  | n, especially in confined areas. |                     |  |  |  |  |  |  |  |
| Eye/face Protection                                   | Wear appropriate protective eyeglasses or chemical safety goggles as described by<br>OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard<br>EN166.  |                                  |                     |  |  |  |  |  |  |  |
| Skin and body protection<br>Respiratory Protection    | Wear appropriate protective gloves and clothing to prevent skin exposure.<br>Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard<br>EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if<br>exposure limits are exceeded or if irritation or other symptoms are experienced. |                                  |                     |  |  |  |  |  |  |  |
| Hygiene Measures                                      | Handle in accordance with good industrial hygiene and safety practice.   |                                  |                     |  |  |  |  |  |  |  |

| Hygiene I | Measures |
|-----------|----------|
|-----------|----------|

| 9            | Physical | and | chemical | properties |
|--------------|----------|-----|----------|------------|
| - <b>7</b> . | FIIYSICA | anu | Chennea  |            |

| Physical State                         | Solid                    |
|--|--------------------------|
| Appearance                             | Dark brown               |
| Odor                                   | Odorless                 |
| Odor Threshold                         | No information available |
| рН                                     | No information available |
| Melting Point/Range                    | No data available        |
| Boiling Point/Range                    | No information available |
| Flash Point                            | Not applicable           |
| Evaporation Rate                       | negligible               |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | negligible               |
| Vapor Density                          | No information available |
| Relative Density                       | No information available |
| Solubility                             | Soluble in water         |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | No information available |
|  |                          |

No information available No information available C20H19CIN4 350.6128

| 10. Stability and reactivity   |          |  |                   |                |            |            |  |  |
|--|----------|--|-------------------|----------------|------------|------------|--|--|
| Reactive Hazard  |          | None known, based on information available   |                   |                |            |            |  |  |
| Stability  |          | Stable under norm  | al conditions.    |                |            |            |  |  |
| Conditions to Avoid  | ł        | Temperatures abo   | ve 240°C. Avoid d | ust formation. |            |            |  |  |
| Incompatible Mater   | ials     | No information ava   | ailable           |                |            |            |  |  |
| Hazardous Decomposition Products Hydrogen chloride gas, Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ) |          |  |                   |                |            |            |  |  |
| Hazardous Polyme   | rization | No information available.  |                   |                |            |            |  |  |
| Hazardous Reaction   | ns       | None under normal processing.  |                   |                |            |            |  |  |
| 11. Toxicological information  |          |  |                   |                |            |            |  |  |
| Acute Toxicity   |          |  |                   |                |            |            |  |  |
| Product Information  |          | No acute toxicity information is available for this product                              |                   |                |            |            |  |  |
| Component Informa<br>Toxicologically Syr<br>Products   |          | No information ava   | ailable           |                |            |            |  |  |
| Delayed and immediate effects as well as chronic effects from short and long-term exposure   |          |  |                   |                |            |            |  |  |
| Irritation   |          | Irritating to eyes and skin  |                   |                |            |            |  |  |
| 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     |  |  |
| Phenazinium,   | 477-73-6 | Not listed   | Not listed        | Not listed     | Not listed | Not listed |  |  |

| Phenazinium,<br>3,7-diamino-2,8-dimet<br>hyl-5-phenyl-, chloride477-73-6Not listedNot listed | Component               | CAS-No        | IARC                      | NTP        | ACGIH      | OSHA       | Mexico     |  |
|--|-------------------------|---------------|---------------------------|------------|------------|------------|------------|--|
| Mutagenic Effects   No information available     Reproductive Effects   No information available.     Developmental Effects   No information available.     Feratogenicity   No information available.     STOT - single exposure   None known     STOT - repeated exposure   No information available.     Aspiration hazard   No information available     Symptoms / effects,both acute and   No information available  |                         | 477-73-6      | Not listed                | Not listed | Not listed | Not listed | Not listed |  |
| Reproductive EffectsNo information available.Developmental EffectsNo information available.TeratogenicityNo information available.STOT - single exposureNone knownSTOT - repeated exposureNone knownAspiration hazardNo information availableSymptoms / effects,both acute and<br>No information availableNo information available   | hyl-5-phenyl-, chloride |               |                           |            |            |            |            |  |
| Developmental Effects   No information available.     Feratogenicity   No information available.     STOT - single exposure   None known     STOT - repeated exposure   None known     Aspiration hazard   No information available     Symptoms / effects,both acute and leaved   No information available  | Iutagenic Effects       |               | No information ava        | ailable    |            |            |            |  |
| Teratogenicity   No information available.     STOT - single exposure   None known     STOT - repeated exposure   None known     Aspiration hazard   No information available     Symptoms / effects,both acute and lelayed   No information available   | Reproductive Effects    |               | No information ava        | ailable.   |            |            |            |  |
| STOT - single exposure None known   STOT - repeated exposure None known   Aspiration hazard No information available   Symptoms / effects,both acute and known No information available  | Developmental Effect    | s             | No information ava        | ailable.   |            |            |            |  |
| STOT - repeated exposure   None known     Aspiration hazard   No information available     Symptoms / effects,both acute and lefayed   No information available  | Feratogenicity          |               | No information available. |            |            |            |            |  |
| Symptoms / effects,both acute and No information available lelayed   | • .                     |               |                           |            |            |            |            |  |
| delayed  | Aspiration hazard       |               | No information ava        | ailable    |            |            |            |  |
| Endocrine Disruptor Information No information available   |                         | oth acute and | No information ava        | ailable    |            |            |            |  |
|  | Endocrine Disruptor I   | nformation    | No information ava        | ailable    |            |            |            |  |

| Other Adverse Effects                           | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.  |  |  |  |  |  |
|---|---|--|--|--|--|--|
|   | 12. Ecological information  |  |  |  |  |  |
| <u>Ecotoxicity</u><br>Do not empty into drains. |   |  |  |  |  |  |
| Persistence and Degradability                   | No information available  |  |  |  |  |  |
| <b>Bioaccumulation/ Accumulation</b>            | No information available.   |  |  |  |  |  |
| Mobility  | No information available.   |  |  |  |  |  |
|   | 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   |  |  |  |  |  |
| <u>TDG</u><br>IATA                              | Not regulated   |  |  |  |  |  |

## International Inventories

| Component                    | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Phenazinium,                 | Х    | Х   | -    | 207-518-8 | -      |     | Х     | Х    | Х    | Х     | Х    |
| 3,7-diamino-2,8-dimethyl-5-p |      |     |      |           |        |     |       |      |      |       |      |
| henyl-, chloride             |      |     |      |           |        |     |       |      |      |       |      |

15. Regulatory information

Legend: X - Listed

IMDG/IMO

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.

Not regulated

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 Hazardous Categorization |  |
|---------------------------------------|--|
| Acute Health Hazard                   |  |
| Chronic Health Harard                 |  |

| Chronic Health Hazard             | No |
|-----------------------------------|----|
| Fire Hazard                       | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard                   | No |

Yes

| 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 |
|---------------------------|--|
| Camornia Proposition 05   | This product does not contain any proposition of chemicals |

State Right-to-Know 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

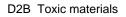
Mexico - Grade

No information available

### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class





16. Other information

Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com

12-Dec-1997 08-Aug-2014 08-Aug-2014 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

Prepared By

**Creation Date** 

**Revision Date** 

**Revision Summary** 

Print Date

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of SDS**