Material Safety Data Sheet
Safranin O
MSDS\# 60520

# Section 1 - Chemical Product and Company Identification 

MSDS Name: $\quad$ Safranin O
Catalog Numbers: S670-100, S670-25
Synonyms: Basic Red 2; 3,7-Diamino-2,8-dimethyl-5-phenylphenazinium chloride; C.I. 50240; Tolusafranine.

## Fisher Scientific

Company Identification:
For information in the US, call:
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Number US:
201-796-7100

CHEMTREC Phone Number, US:
201-796-7100
800-424-9300
Section 2 - Composition, Information on Ingredients


Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Warning! May cause respiratory tract irritation. The toxicological properties of this material have not been fully investigated. Causes eye and skin irritation. Eye contact may result in permanent eye damage. Target Organs: Eyes.

## Potential Health Effects

Eye: Causes eye irritation. This product contains a cationic dye. Similar dyes have caused permanent injury to the
Skin: Causes skin irritation.
Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic: No information found.

## Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: $\quad$ Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to
Physician:

## Section 5 - Fire Fighting Measures

General As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH Information: (approved or equivalent), and full protective gear. Combustion generates toxic fumes.
Extinguishing
Media:
Use water spray, dry chemical, or carbon dioxide.

## Autoignition <br> Temperature: Not applicable.

Flash Point: Not applicable.
Explosion Limits:
Not available
Lower:
Explosion Limits: Not available
Upper:
NFPA Rating: health: 2 ; flammability: 0 ; instability: 0 ;

## Section 6 - Accidental Release Measures

General Information:

Spills/Leaks: Use proper personal protective equipment as indicated in Section 8.

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get on skin or in eyes. Do not ingest or inhale.

Storage:
Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: C.I. Basic Red 2: None listed
Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.
Exposure Limits
Personal Protective Equipment
Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties
Physical State: Solid
Color: dark brown
Odor: none reported
pH : Not available
Vapor Pressure: Negligible.
Vapor Density: Not available
Evaporation Rate: Negligible.

Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Soluble in water.
Specific Gravity/Density: Not available.
Molecular Formula: C20H19ClN4
Molecular Weight: 350.6128
Section 10 - Stability and Reactivity
Chemical Stability: Stable. However, may decompose if heated.
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition Products
Hazardous Polymerization

Incompatible materials, temperatures above $240^{\circ} \mathrm{C}$.
Not available
Hydrogen chloride, carbon monoxide, oxides of nitrogen, carbon dioxide. Has not been reported.
Section 11-Toxicological Information

RTECS\#: CAS\# 477-73-6: SG1623000
LD50/LC50: RTECS: Not available.
Carcinogenicity: C.I. Basic Red 2 - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: $\quad$ See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Not available
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

## Section 15 - Regulatory Information

## European/International Regulations <br> European Labeling in Accordance with EC Directives

Hazard Symbols: XI
Risk Phrases:
R 36/38 Irritating to eyes and skin.
Safety Phrases:
WGK (Water Danger/Protection)
CAS\# 477-73-6: Not available
Canada
CAS\# 477-73-6 is listed on Canada's DSL List
Canadian WHMIS Classifications: D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS\# 477-73-6 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 477-73-6 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 12/12/1997
Revision \#6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

