

# SAFRANINE

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 01/06/2022

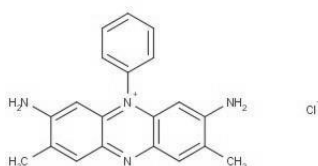
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

|                    |  |
|--------------------|--|
| Product form       | : Substance  |
| Substance name     | : SAFRANINE FOR MICROSCOPY                         |
| EC-No.             | : 207-518-8  |
| CAS-No.            | : 477-73-6   |
| Type of product    | : Pure substance                                   |
| Formula            | : C <sub>20</sub> H <sub>19</sub> ClN <sub>4</sub> |
| Chemical structure | :  |



|          |  |
|----------|--|
| Synonyms | : 2,8-dimethylphenosafuranine / 3,7-diamino-2,8-dimethyl-5-phenylphenazinium chloride / basic red 2 / brilliant safranin BR / brilliant safranin G / brilliant safranin GR / C.I. 50240 / C.I. basic red 2 / calcozine red Y / cerven zasadita 2 / gossypimine / hidaco safranin / leather red HT / mitsui safranin / nippon kagaku safranin GK / nippon kagaku safranin T / phenazinium, 3,7-diamino-2,8-dimethyl-5-phenyl-, chloride / safranin / safranin O / safranin O, certified / safranin T / safranin / safranin A / safranin B / safranin G / safranin GF / safranin J / safranin OK / safranin superfine G / safranin T / safranin TH / safranin TN / safranin Y / safranin YN / safranin ZH / tolusafuranine |
|----------|--|

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

|                                  |   |
|----------------------------------|---|
| Industrial/Professional use spec | : For professional use only             |
| Use of the substance/mixture     | : For microscopy<br>Laboratory chemical |

##### 1.2.2. Uses advised against

No additional information available

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

ISOLAB Laborgeräte GmbH  
Am Dillhof 2 - 63863 Eschau / GERMANY  
Tel: + 49 93 74 / 978 55-0  
Fax: +49 93 74 / 978 55-29  
[prodsafe@isolab.de](mailto:prodsafe@isolab.de)

#### 1.4. Emergency telephone number

| Country | Organisation/Company  | Address                           | Emergency number | Comment |
|---------|---|-----------------------------------|------------------|---------|
| Germany | Giftnotruf der Charité<br>CBF, Haus VIII (Wirtschaftsgebäude), UG | Hindenburgdamm 30<br>12203 Berlin | +49 30 19240     |         |

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 1 H318

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H318 - Causes serious eye damage

Precautionary statements (CLP) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

| Name      | Product identifier                       | %   |
|-----------|--|-----|
| SAFRANINE | (CAS-No.) 477-73-6<br>(EC-No.) 207-518-8 | 100 |

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general :

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation :

Remove the victim into fresh air.

First-aid measures after skin contact :

Wash immediately with lots of water (15 minutes)/shower. Soap may be used.

First-aid measures after eye contact :

Rinse immediately with plenty of water for 15 minutes. Take victim to an ophthalmologist. Do not apply neutralizing agents.

First-aid measures after ingestion :

Rinse mouth with water. Victim is fully conscious: immediately induce vomiting. Ingestion of large quantities: immediately to hospital. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)).

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact :

Tingling/irritation of the skin.

Symptoms/effects after eye contact :

Irritation of the eye tissue.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media :

Water spray. Polyvalent foam. Alcohol-resistant foam. ABC powder. Carbon dioxide.

Unsuitable extinguishing media :

No unsuitable extinguishing media known.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard :

DIRECT FIRE HAZARD. No data available on direct fire hazard. INDIRECT FIRE HAZARD. No data available on indirect fire hazard.

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Explosion hazard : DIRECT EXPLOSION HAZARD. No data available on direct explosion hazard. INDIRECT EXPLOSION HAZARD. No data available on indirect explosion hazard.

### 5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit.

Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray.

Methods for cleaning up : Prevent dust cloud formation. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Reduce/avoid exposure and/or contact. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local.

### 7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.

Storage area : Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: No data available. MATERIAL TO AVOID: No data available.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Personal protective equipment:

Gloves. Safety glasses.

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### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available

### Hand protection:

Gloves

### Eye protection:

Face shield. In case of dust production: protective goggles

### Skin and body protection:

Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing

### Respiratory protection:

Dust formation: dust mask



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                                |
|--|--------------------------------|
| Physical state                             | : Solid                        |
| Appearance                                 | : Solid. Powder.               |
| Molecular mass                             | : 350.85 g/mol                 |
| Colour                                     | : Dark reddish brown.          |
| Odour                                      | : Pungent Odour.               |
| Odour threshold                            | : No data available            |
| pH   | : No data available            |
| Relative evaporation rate (butylacetate=1) | : No data available            |
| Melting point                              | : > 240°C                      |
| Freezing point                             | : No data available            |
| Boiling point                              | : No data available            |
| Flash point                                | : No data available            |
| Auto-ignition temperature                  | : No data available            |
| Decomposition temperature                  | : No data available            |
| Flammability (solid, gas)                  | : No data available            |
| Vapour pressure                            | : No data available            |
| Relative vapour density at 20 °C           | : No data available            |
| Relative density                           | : No data available            |
| Solubility                                 | : Moderately soluble in water. |
| Log Pow                                    | : No data available            |
| Viscosity, kinematic                       | : No data available            |
| Viscosity, dynamic                         | : No data available            |
| Explosive properties                       | : No data available            |
| Oxidising properties                       | : No data available            |
| Explosive limits                           | : No data available            |

### 9.2. Other information

Other properties : Substance has basic reaction.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On heating/burning: release of toxic and corrosive gases/vapours (nitrous vapours, hydrogen chloride, carbon monoxide - carbon dioxide).

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |  |
|-----------------------------------|--|
| Acute toxicity                    | : Not classified                             |
| Skin corrosion/irritation         | : Causes skin irritation.<br>pH: 10 (1 %)    |
| Serious eye damage/irritation     | : Causes serious eye damage.<br>pH: 10 (1 %) |
| Respiratory or skin sensitisation | : Not classified                             |
| Germ cell mutagenicity            | : Not classified                             |
| Carcinogenicity                   | : Not classified                             |
| Reproductive toxicity             | : Not classified                             |
| STOT-single exposure              | : Not classified                             |
| STOT-repeated exposure            | : Not classified                             |
| Aspiration hazard                 | : Not classified                             |

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Water pollutant (surface water). pH shift. No data available on ecotoxicity.

### 12.2. Persistence and degradability

| SAFRANINE (477-73-6)          |   |
|-------------------------------|---|
| Persistence and degradability | Biodegradability in water: no data available. |

### 12.3. Bioaccumulative potential

| SAFRANINE (477-73-6)      |                                    |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|  |  |
|--|--|
| Product/Packaging disposal recommendations | : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. |
| Additional information                     | : Can be considered as non hazardous waste according to Directive 2008/98/EC.  |
| European List of Waste (LoW) code          | : 07 03 99 - wastes not otherwise specified  |

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### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR                                     | IMDG           | IATA           | ADN            | RID            |
|---|----------------|----------------|----------------|----------------|
| <b>14.1. UN number</b>                  |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.2. UN proper shipping name</b>    |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.4. Packing group</b>              |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| <b>14.5. Environmental hazards</b>      |                |                |                |                |
| Not applicable                          | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available  |                |                |                |                |

#### 14.6. Special precautions for user

**- Overland transport**

Not applicable

**- Transport by sea**

Not applicable

**- Air transport**

Not applicable

**- Inland waterway transport**

Not applicable

**- Rail transport**

Not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

SAFRANINE is not on the REACH Candidate List

SAFRANINE is not on the REACH Annex XIV List

##### 15.1.2. National regulations

###### Germany

VwVwS Annex reference

: Water hazard class (WGK) 2, hazard to waters

WGK remark

: Classification water polluting according to external literature source

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

###### Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: The substance is not listed

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NIET-limitatieve lijst van voor de voortplanting : The substance is not listed  
giftige stoffen – Ontwikkeling

### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Abbreviations and acronyms:

|       |   |
|-------|---|
| ADN   | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways   |
| ADR   | European Agreement concerning the International Carriage of Dangerous Goods by Road               |
| CLP   | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| IATA  | International Air Transport Association   |
| IMDG  | International Maritime Dangerous Goods  |
| PBT   | Persistent Bioaccumulative Toxic  |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID   | Regulations concerning the International Carriage of Dangerous Goods by Rail                      |
| vPvB  | Very Persistent and Very Bioaccumulative  |
| SDS   | Safety Data Sheet   |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

|            |   |
|------------|---|
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| H318       | Causes serious eye damage                     |

SDS ISOLAB

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*