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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

Cat. # 786-1265

Mayer's Hematoxylin Solution, Modified

Size: 1Gallon



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# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Mayer's Hematoxylin Solution, Modified  
Product code : 126M  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

No additional information available

##### 1.2.2. Uses advised against

No additional information available

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

Geno Technology, Inc./ G-Biosciences  
9800 Page Avenue  
63132-1429 Saint Louis - United States  
T 800-628-7730 - F 314-991-1504  
[technical@GBiosciences.com](mailto:technical@GBiosciences.com) - [www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2: Hazards identification

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

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

Not classified

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. Causes skin irritation. Causes serious eye irritation.

#### 2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name  | Product identifier   | %          | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |
|---|--|------------|---|
| Deionized water                                 | (CAS-No.) 7732-18-5  | >= 80      | Not classified  |
| aluminium potassium bis(sulfate), dodecahydrate | (CAS-No.) 7784-24-9  | 5 - 10     | Not classified  |
| acetic acid                                     | (CAS-No.) 64-19-7<br>(EC-No.) 200-580-7<br>(EC Index-No.) 607-002-00-6 | 2 - 5      | Flam. Liq. 3, H226<br>Acute Tox. 4 (Inhalation:vapour), H332<br>Skin Corr. 1A, H314                           |
| hematoxylin                                     | (CAS-No.) 517-28-2<br>(EC-No.) 208-237-3                               | 0.05 - 0.5 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335                     |
| sodium iodate                                   | (CAS-No.) 7681-55-2<br>(EC-No.) 231-672-5                              | < 0.05     | Ox. Sol. 2, H272<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 |

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| Specific concentration limits: |  |  |
|--------------------------------|--|--|
| Name                           | Product identifier   | Specific concentration limits  |
| acetic acid                    | (CAS-No.) 64-19-7<br>(EC-No.) 200-580-7<br>(EC Index-No.) 607-002-00-6 | ( 10 =<C < 25) Eye Irrit. 2, H319<br>( 10 =<C < 25) Skin Irrit. 2, H315<br>( 25 =<C < 90) Skin Corr. 1B, H314<br>( 90 =<C < 100) Skin Corr. 1A, H314 |

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : 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. |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.   |

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

|                                     |                   |
|-------------------------------------|-------------------|
| Symptoms/effects after skin contact | : Irritation.     |
| Symptoms/effects after eye contact  | : Eye irritation. |

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

|  |                                |
|--|--------------------------------|
| Fire hazard                                      | : Combustible liquid.          |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

|                         |   |
|-------------------------|---|
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
| Other information       | : Dispose of materials or solid residues at an authorized site.   |

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                               |   |
|-------------------------------|---|
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. |
| Hygiene measures              | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.  |

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

Storage conditions : Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### aluminium potassium bis(sulfate), dodecahydrate (7784-24-9)

##### United Kingdom - Occupational Exposure Limits

|                              |                     |
|------------------------------|---------------------|
| WEL TWA (mg/m <sup>3</sup> ) | 2 mg/m <sup>3</sup> |
|------------------------------|---------------------|

##### acetic acid (64-19-7)

##### EU - Occupational Exposure Limits

|                                |                      |
|--------------------------------|----------------------|
| IOELV TWA (mg/m <sup>3</sup> ) | 25 mg/m <sup>3</sup> |
|--------------------------------|----------------------|

|                 |        |
|-----------------|--------|
| IOELV TWA (ppm) | 10 ppm |
|-----------------|--------|

|                                 |                      |
|---------------------------------|----------------------|
| IOELV STEL (mg/m <sup>3</sup> ) | 50 mg/m <sup>3</sup> |
|---------------------------------|----------------------|

|                  |        |
|------------------|--------|
| IOELV STEL (ppm) | 20 ppm |
|------------------|--------|

##### United Kingdom - Occupational Exposure Limits

|                              |                      |
|------------------------------|----------------------|
| WEL TWA (mg/m <sup>3</sup> ) | 25 mg/m <sup>3</sup> |
|------------------------------|----------------------|

|               |        |
|---------------|--------|
| WEL TWA (ppm) | 10 ppm |
|---------------|--------|

|                               |                      |
|-------------------------------|----------------------|
| WEL STEL (mg/m <sup>3</sup> ) | 50 mg/m <sup>3</sup> |
|-------------------------------|----------------------|

|                |        |
|----------------|--------|
| WEL STEL (ppm) | 20 ppm |
|----------------|--------|

#### 8.2. Exposure controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

##### Environmental exposure controls:

Avoid release to the environment.

### SECTION 9: Physical and chemical properties

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

|  |                     |
|--|---------------------|
| Physical state                             | : Liquid            |
| Colour                                     | : No data available |
| Odour                                      | : No data available |
| Odour threshold                            | : No data available |
| pH   | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point                              | : Not applicable    |
| Freezing point                             | : No data available |
| Boiling point                              | : No data available |
| Flash point                                | : 85 °C             |
| Auto-ignition temperature                  | : No data available |
| Decomposition temperature                  | : No data available |
| Flammability (solid, gas)                  | : Not applicable    |
| Vapour pressure                            | : No data available |
| Relative vapour density at 20 °C           | : No data available |
| Relative density                           | : No data available |
| Solubility                                 | : No data available |
| Log Pow                                    | : No data available |
| Viscosity, kinematic                       | : No data available |

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                      |                     |
|----------------------|---------------------|
| Viscosity, dynamic   | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits     | : No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                             |                  |
|-----------------------------|------------------|
| Acute toxicity (oral)       | : Not classified |
| Acute toxicity (dermal)     | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

#### hematoxylin (517-28-2)

|               |   |
|---------------|---|
| LD50 oral rat | 400 mg/kg (Rat, Literature study, Oral) |
|---------------|---|

#### acetic acid (64-19-7)

|                            |  |
|----------------------------|--|
| LD50 oral rat              | 3310 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral)   |
| LC50 inhalation rat (mg/l) | 11.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours), 14 day(s)) |

|                                   |                  |
|-----------------------------------|------------------|
| Skin corrosion/irritation         | : Not classified |
| Serious eye damage/irritation     | : Not classified |
| 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 - general        | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Acute aquatic toxicity   | : Not classified  |
| Chronic aquatic toxicity | : Not classified  |

#### acetic acid (64-19-7)

|                    |  |
|--------------------|--|
| LC50 fish 1        | > 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)    |
| EC50 Daphnia 1     | > 1000 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| EC50 72h algae (1) | > 1000 mg/l (ISO 10253, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)                                  |

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 12.2. Persistence and degradability

| aluminium potassium bis(sulfate), dodecahydrate (7784-24-9) |                                   |
|---|-----------------------------------|
| Persistence and degradability                               | Biodegradability: not applicable. |
| Chemical oxygen demand (COD)                                | Not applicable                    |
| ThOD  | Not applicable                    |
| BOD (% of ThOD)   | Not applicable                    |

### hematoxylin (517-28-2)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | Biodegradability in water: no data available. |
|-------------------------------|---|

### sodium iodate (7681-55-2)

|                               |                                   |
|-------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD)  | Not applicable                    |
| ThOD                          | Not applicable                    |
| BOD (% of ThOD)               | Not applicable                    |

### acetic acid (64-19-7)

|                                 |  |
|---------------------------------|--|
| Persistence and degradability   | Readily biodegradable in the soil. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.6 - 0.74 g O <sub>2</sub> /g substance                           |
| Chemical oxygen demand (COD)    | 1.03 g O <sub>2</sub> /g substance                                 |
| ThOD                            | 1.07 g O <sub>2</sub> /g substance                                 |

### 12.3. Bioaccumulative potential

| aluminium potassium bis(sulfate), dodecahydrate (7784-24-9) |                                    |
|---|------------------------------------|
| Bioaccumulative potential                                   | No bioaccumulation data available. |

### hematoxylin (517-28-2)

|                           |  |
|---------------------------|--|
| Log Pow                   | 0.71 (Calculated, 25 °C)                         |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

### sodium iodate (7681-55-2)

|                           |                      |
|---------------------------|----------------------|
| Log Pow                   | -7.18                |
| Bioaccumulative potential | Not bioaccumulative. |

### acetic acid (64-19-7)

|                           |                                   |
|---------------------------|-----------------------------------|
| BCF fish 1                | 3.16 (Pisces, Fresh water, QSAR)  |
| Log Pow                   | -0.17 (Experimental value, 25 °C) |
| Bioaccumulative potential | Not bioaccumulative.              |

### 12.4. Mobility in soil

| hematoxylin (517-28-2) |   |
|------------------------|---|
| Ecology - soil         | No (test)data on mobility of the substance available. |

### acetic acid (64-19-7)

|                 |  |
|-----------------|--|
| Surface tension | 26.3 mN/m (30 °C)  |
| Ecology - soil  | Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation. |

### 12.5. Results of PBT and vPvB assessment

| Component             |   |
|-----------------------|---|
| acetic acid (64-19-7) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Waste treatment methods.

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR) : Not applicable  
UN-No. (IMDG) : Not applicable  
UN-No. (IATA) : Not applicable  
UN-No. (ADN) : Not applicable  
UN-No. (RID) : Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable  
Proper Shipping Name (IMDG) : Not applicable  
Proper Shipping Name (IATA) : Not applicable  
Proper Shipping Name (ADN) : Not applicable  
Proper Shipping Name (RID) : Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable

#### IATA

Transport hazard class(es) (IATA) : Not applicable

#### ADN

Transport hazard class(es) (ADN) : Not applicable

#### RID

Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : 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

# Mayer's Hematoxylin Solution, Modified

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

| Full text of H- and EUH-statements: |  |
|-------------------------------------|--|
| Acute Tox. 4 (Inhalation:vapour)    | Acute toxicity (inhalation:vapour) Category 4  |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4  |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |
| Ox. Sol. 2                          | Oxidising Solids, Category 2   |
| Skin Corr. 1A                       | Skin corrosion/irritation, Category 1A   |
| Skin Corr. 1B                       | Skin corrosion/irritation, Category 1B   |
| Skin Irrit. 2                       | Skin corrosion/irritation, Category 2  |
| STOT SE 3                           | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226                                | Flammable liquid and vapour.   |
| H272                                | May intensify fire; oxidiser.  |
| H302                                | Harmful if swallowed.  |
| H314                                | Causes severe skin burns and eye damage.   |
| H315                                | Causes skin irritation.  |
| H319                                | Causes serious eye irritation.   |
| H332                                | Harmful if inhaled.  |
| H335                                | May cause respiratory irritation.  |
| EUH210                              | Safety data sheet available on request.  |

Safety Data Sheet applicable for regions

: GB - United Kingdom

SDS EU (REACH Annex II)

*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.*