1 Identification of the substances/mixture and of the company/undertaking

1.1 Product Identifiers

Product Number  S034
Product Name    Hematoxylin (Harris)
REACH Registration Number
This product is a mixture. Reach registration number is not available for this mixture.

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

1.2.1 Relevant identified uses
Laboratory Chemicals, Analytical Purpose, Biochemical Analysis
For In Vitro Diagnostic Use

1.3 Details of the supplier of the safety data sheet

Produced by    HiMedia Laboratories Private Limited
Address        23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086, India
Tel. No.       +91-22-2500 0970, +91-22-2500 1607
Fax No.        : +91-22-2500 2468
Mail Id        info@himedialabs.com
Website        www.himedialabs.com

1.4 Emergency Tel. No.
Emergency Tel. No. Please contact the regional HiMedia representation in your country

2 Hazards Identification

2.1 Classification of the substance or mixture

CLP Classification-Regulation (EC) No. 1272/2008 [EU-GHS/CLP]
Flammable liquids, (Category 3), H226
Hazardous to the aquatic environment, long term hazard, (Category 1), H410

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word Warning

Hazard Statement(s)
H226 Flammable liquid and vapour
H410 Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P403 + P235 Store in a well-ventilated place. Keep cool.
2.3 Other Hazards
None

3 Composition/Information On Ingredients
3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haematoxylin</td>
<td>As Per EC Regulation 1272/2008 Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H302; H315; H319; H335</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. : 517-28-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No. : 208-237-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium alum, dodecahydrate</td>
<td>As Per EC Regulation 1272/2008 Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
<td>&gt;=10.0 - &lt;=20.0%</td>
</tr>
<tr>
<td>CAS No. : 7784-26-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No. : 232-055-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercuric oxide</td>
<td>As Per EC Regulation 1272/2008 Acute Tox.oral. 2; Acute Tox. 1; Acute Tox.inhal. 2; STOT RE 2; Aquatic Chronic 1 H300; H310; H330; H373; H410</td>
<td>&gt;=0.1 - &lt;=0.5%</td>
</tr>
<tr>
<td>CAS No. : 21908-53-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No. : 244-654-7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>As Per EC Regulation 1272/2008 Flam. Liq. 2; Eye Irrit. 2A H225; H319</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No. : 64-17-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No. : 200-578-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No : 603-002-00-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes & classification.

4 First Aid Measures
4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash with plenty of soap and water. Consult a physician.
**In case of eye contact**
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 **Most important symptoms and effects, both acute and delayed**
No data available.

4.3 **Indication of immediate medical attention and special treatment needed**
No data available.

---

5 **Fire Fighting Measures**

5.1 **Extinguishing media**

*Suitable extinguishing media*
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

*Unsuitable extinguishing media*
No data available.

5.2 **Special hazards arising from the substance or mixture**
Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Aluminum oxide

5.3 **Precautions for fire-fighters**
Wear self contained breathing apparatus for fire fighting if necessary

5.4 **Further information**
No data available

---

6 **Accidental Release Measures**

6.1 **Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 **Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 **Methods and materials for containment and cleaning up**
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**
For disposal see Section 13.

---

7 **Handling and Storage**

7.1 **Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

*Recommended Storage Temperature*: On receipt store between 10-30°C

7.3 **Specific end uses**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
8 Exposure Controls/Personal Protection

8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.

**Personal protective equipment**

**Hygiene measure**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

**Eye/face protection**
Tightly fitting safety goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environment exposure controls**
Do not empty into drains.

---

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Red coloured clear solution</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
9.2 Other safety information
No data available

10 Stability and Reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
No data available

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Refer Section 5.2

11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity- single exposure
No data available

Aspiration hazard
No data available

Potential Health Effects

Inhalation
11.2 Components

Haematoxylin

*Acute oral toxicity*
Rat LD50: 400 mg/kg

*Acute inhalation toxicity*
No data available

*Acute dermal toxicity*
No data available

*Skin irritation*
No data available

*Eye irritation*
No data available

*Sensitisation*
No data available

*Ames test*
No data available

*Mutagenicity (mammal cell test)*
No data available

*Carcinogenicity*
No data available

*Toxicity to Reproduction*
No data available

*Teratogenicity*
No data available

Additional information:
RTECS: MH7875000

Aluminium ammonium bis(sulphate)

*Acute oral toxicity*
No data available

*Acute inhalation toxicity*
No data available

*Acute dermal toxicity*
Rat LD50: > 2,000 mg/kg (As per OECD Guideline 402)

*Skin irritation*
Rabbit Result: Non Irritant (As per OECD Guideline 404)

Eye irritation
No data available

Sensitisation
Mouse Result: not sensitising (As per OECD Guideline 429)

Ames test
Salmonella Typhimurium
Result: Negative (ECHA)

Genetic toxicity (in-vivo)
Micronucleus assay
Result: Negative

Carcinogenicity
No data available

Toxicity to Reproduction
No data available

Teratogenicity
No data available

Additional information:
RTECS: No data available

Mercuric oxide

Acute oral toxicity
Rat LD50: 18 mg/kg

Acute inhalation toxicity
No data available

Acute dermal toxicity
Rat LD50: 315 mg/kg

Skin irritation
No data available

Eye irritation
No data available

Sensitisation
No data available

Genetic toxicity (in-vitro)
No data available

Genetic toxicity (in-vivo)
No data available

Carcinogenicity
No data available

Toxicity to Reproduction
No data available

Teratogenicity
No data available

Additional information:
RTECS: OW8750000
Ethanol (Ethyl alcohol)

*Acute oral toxicity*
Rat LD50: 10,470 mg/kg
(As Per OECD Test Guideline 401)

*Acute inhalation toxicity*
Rat LC50: 124.7 mg/l; 4 h; Vapour
(As Per OECD Test Guideline 403)

*Acute dermal toxicity*
No data available

*Skin irritation*
Rabbit Result: Non Irritant
(As Per OECD Test Guideline 404)

*Eye irritation*
Rabbit Result: Eye irritation
(As Per OECD Test Guideline 405)

*Sensitisation*
Result: Negative
(As Per IUCLID)

*Ames test*
Salmonella Typhimurium
Result: Negative
(As Per OECD Test Guideline 471)

**Additional information:**
RTECS: KQ6300000

---

12 Ecological Information
12.1 Toxicity
No data available

Components:

Haematoxylin

Toxicity
No data available

Components:

Aluminium ammonium(bis)sulphate

Toxicity to fish
Danio rerio NOEC: >= 0.105 mg/L; 96h

Toxicity to aquatic invertebrates
Daphnia magna (Static test) EC50: 47.5 mg/L; 48h

Toxicity to aquatic algae and cyanobacteria
Pseudokirchnerella subcapitata EC50: 14mg/L; 72h

**Toxicity to microorganisms**
Activated sludge (Static test) EC50: > 1,000 mg/L; 3h

**Components:**

- **Mercuric oxide**
  - **Toxicity**
  - No data available

**Component:**

- **Ethanol (Ethyl alcohol)**
  - **Toxicity to fish**
    - Leuciscus idus (Golden orfe) LC50: 8,140 mg/l; 48 h (As Per IUCLID)
    - Pimephales promelas (fathead minnow) LC50: 14,200 mg/l; 96h
  - **Toxicity to daphnia and other aquatic invertebrates**
    - Daphnia magna (Water flea) EC50: 9,268-14,221 mg/l; 48h (As Per IUCLID)
    - Daphnia magna (Water flea) NOEC: 9.6 mg/l; 9d
  - **Toxicity to algae**
    - Scenedesmus quadricauda (Green algae) IC50: 5,000 mg/l; 7d
    - Chlorella vulgaris (Fresh water algae) EC50: 275 mg/l; 72h (As Per OECD Test Guideline 201)
  - **Toxicity to bacteria**
    - Pseudomonas putida EC50: 6,500 mg/l; 16 h (As Per IUCLID)

12.2 **Persistence and degradability**
No data available

12.3 **Bioaccumulative potential**
No data available

12.4 **Mobility in soil**
No data available

12.5 **PBT and vPvB assessment**
This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) at levels of 0.1% or higher.

12.6 **Other adverse effects**
Discharge into the environment must be avoided.

**Disposal Considerations**

13.1 **Waste treatments methods**

- **Product**
  - Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose off this material.

13.2 **Contaminated packaging**
Dispose of as unused product.
14 Transport Information

14.1 UN-No
   ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name
   ADNR : Not dangerous goods
   ADR : Not dangerous goods
   IATA_C : Not dangerous goods
   IATA_P : Not dangerous goods
   IMDG : Not dangerous goods
   RID : Not dangerous goods

14.3 Transport hazard class(es)
   ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID :

14.4 Packaging group
   ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.5 Environmental hazards
   ADNR : NO ADR : NO IMDG : Marine pollutant: NO IATA_C : NO IATA_P : NO RID : NO

14.6 Special precautions for use
   No data available

15 Regulatory Information
   This safety datasheet complies with the requirements of Regulation(EC) No. 1907/2006.

15.1 Safety health and environment regulations/legislation specific for the substance or mixture
   No data available

15.2 Chemical Safety Assessment
   No data available

16 Other information
   Text of H codes and classification mentioned in section 3
   H225 Highly flammable liquid and vapour
   H300 Fatal if swallowed
   H302 Harmful if swallowed
   H310 Fatal in contact with skin
   H315 Causes skin irritation
   H319 Causes serious eye irritation
   H330 Fatal if inhaled
   H335 May cause respiratory irritation
   H373 May cause damage to organs through prolonged or repeated exposure
   H410 Very toxic to aquatic life with long lasting effects
   Acute Tox. 1 Acute toxicity, dermal, Category 1
   Acute Tox.inhal. 2 Acute toxicity, inhaled, Category 2
   Acute Tox.oral 4 Acute toxicity, oral, Category 4
   Acute Tox.oral. 2 Acute toxicity, oral, Category 2
   Aquatic Chronic 1 Hazardous to the aquatic environment, long term hazard, Category 1
   Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Flam. Liq. 2  Flammable liquids, Category 2
Skin Irrit. 2  Skin corrosion or irritation, Category 2
STOT RE 2  Specific target organ toxicity, repeated exposure, Category 2
STOT SE 3  Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information

Copyright 2016 HiMedia Laboratories Pvt. Ltd.
The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.