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

1.1 Product Identifiers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>S109</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Fixative</td>
</tr>
<tr>
<td>REACH Registration Number</td>
<td>This product is a mixture. Reach registration number is not available for this mixture.</td>
</tr>
</tbody>
</table>

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 2), H225 |
| Skin corrosion or irritation, (Category 1A), H314 |
| Sensitisation, Skin, (Category 1), H317 |
| Serious eye damage or eye irritation, (Category 2A), H319 |
| Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335 |

2.2 Label elements

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

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statement(s)</td>
<td></td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>
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.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 If skin irritation or rash occurs:

P337 + P313 IF eye irritation persists: Get medical advice/attention.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

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>Monosodium phosphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td></td>
</tr>
<tr>
<td>CAS No. :</td>
<td>7601-54-9</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>231-509-8</td>
<td>&lt;=1.0%</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2; Eye Irrit. 2A H315; H319</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>As Per EC Regulation 1272/2008</td>
<td></td>
</tr>
<tr>
<td>CAS No. :</td>
<td>50-00-0</td>
<td>&lt;=20.0%</td>
</tr>
<tr>
<td></td>
<td>Acute Tox.oral. 3; Acute Tox. inhal. 3;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute Tox. dermal. 3; Skin Corr. 1B; Skin Sens. 1; Muta. 2; Carc. 1B H301; H331; H311; H314; H317; H341; H350</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

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>Colourless clear solution</td>
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<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>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Explosive properties  No data available
Oxidizing properties  No data available
Vapour density  No data available
Thermal decomposition  No data available

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
Incompatible material

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
REFER SECTION 2
**Skin**
REFER SECTION 2

**Eyes**
REFER SECTION 2

**Ingestion**
REFER SECTION 2

### 11.2 Components

**Monosodium phosphate**

*Acute oral toxicity*
No data available

*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: WA1900000

**Disodium hydrogen phosphate**

*Acute oral toxicity*
No data available

*Acute inhalation toxicity*
Rat LC50: > 0.83 mg/L air (As per OECD Guideline 403)

*Acute dermal toxicity*
Rabbit Approx. LD50: > 300 mg/kg (ECHA)

*Skin irritation*
Rabbit Result: Non Irritant (ECHA)

*Eye irritation*
Rabbit Result: Slight irritation (ECHA)
**Sensitisation**  
Mouse Result: Not sensitizing (ECHA)

**Genetic toxicity (in-vitro)**  
Bacterial Reverse Mutation Assay  
Result: Negative (As per OECD Guideline 471)

**Genetic toxicity (in-vivo)**  
No data available

**Carcinogenicity**  
No data available

**Toxicity to Reproduction**  
No data available

**Teratogenicity**  
No data available

**Additional information:**  
RTECS: WC4500000

---

Additional information on Formaldehyde

**Acute toxicity**
Acute oral toxicity (LD50): 42 mg/kg [Mouse]. (Formaldehyde) Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit]. (Methyl alcohol).

Acute toxicity of the mist (LC50): 454000 mg/m 4 hours [Mouse]. (Formaldehyde) 3

**CARCINOGENIC EFFECTS:** Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde].

**MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. [Formaldehyde]. Mutagenic for bacteria and/or yeast. [Formaldehyde]. Mutagenic for mammalian somatic cells. [Methyl alcohol].

Mutagenic for bacteria and/or yeast. [Methyl alcohol]. **TERATOGENIC EFFECTS:** Classified POSSIBLE for human [Methyl alcohol].

**Acute Potential Health Effects:**
Skin: Corrosive. Causes skin irritation which may range from mild to severe with possible burns depending on the extent of exposure and concentration of solution. Other symptoms may include brownish discoloration of the skin, urticaria, and pustulovesicular eruptions. May be absorbed through skin with symptoms paralleling those of ingestion.

Eyes: Corrosive. Contact with liquid causes severe eye irritation and burns. It may cause irreversible eye damage (severe corneal Solutions containing low formaldehyde concentrations may produce transient discomfort and irritation.

Inhalation: Causes irritation of the respiratory tract (nose, throat, airways). Symptoms may include dry and sore mouth and throat, thirst, and sleep disturbances, difficulty breathing, shortness of breath, coughing, sneezing, wheezing rhinitis, chest tightness, pulmonary edema, bronchitis, tracheitis, laryngospasm, pneumonia, palpitations. It may also affect metabolism weight loss, metabolic acidosis), behavior/central nervous system (excitement, central nervous system depression, somnolence, convulsions, stupor, aggression, headache, weakness, dizziness, drowsiness, coma), peripheral nervous system, and blood.
Ingestion: Harmful if swallowed. May be fatal. Causes gastrointestinal irritation with nausea, vomiting (possibly with blood), diarrhea, severe pain in mouth, throat and stomach, and possible corrosive injury to the gastrointestinal mucosa/ulceration or bleeding from stomach. May also affect the liver (jaundice), urinary system/kidneys (difficulty urinating, albuminuria, hematuria, anuria), blood, endocrine system, respiration (respiratory obstruction, pulmonary edema, bronchiolar obstruction), cardiovascular system (hypotension), metabolism (metabolic acidosis), eyes (retinal changes, visual field changes), and behavior/central nervous system (symptoms similar to those for inhalation). Contains Methanol which may cause blindness if swallowed.

Chronic Potential Health Effects:
Skin: Prolonged or repeated exposure may cause contact dermatitis both irritant and allergic. It may also cause skin discoloration.
Inhalation: Although there is no clear evidence, prolonged or repeated exposure may induce allergic asthma. Other effects are similar to that of acute exposure.
Ingestion: Prolonged or repeated ingestion may cause gastrointestinal tract irritation and ulceration or bleeding from the stomach. Other effects may be similarly that of acute ingestion.

<table>
<thead>
<tr>
<th>12</th>
<th>Ecological Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1</td>
<td>Toxicity</td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Component:</td>
<td></td>
</tr>
<tr>
<td>Monosodium phosphate</td>
<td></td>
</tr>
<tr>
<td>Toxicity</td>
<td></td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Components:</td>
<td></td>
</tr>
<tr>
<td>Disodium hydrogen phosphate</td>
<td></td>
</tr>
<tr>
<td>Toxicity to aquatic algae and cyanobacteria</td>
<td></td>
</tr>
<tr>
<td>Desmodesmus subspicatus (Static test)EC50: &gt; 100 mg/L; 72h</td>
<td></td>
</tr>
<tr>
<td>Toxicity to microorganisms</td>
<td></td>
</tr>
<tr>
<td>Activated sludge EC50: &gt; 1,000 mg/L; 3h</td>
<td></td>
</tr>
<tr>
<td>Components:</td>
<td></td>
</tr>
<tr>
<td>Formaldehyde</td>
<td></td>
</tr>
<tr>
<td>Eco toxicity:</td>
<td></td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>12.2</td>
<td>Persistence and degradability</td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>12.3</td>
<td>Bioaccumulative potential</td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>12.4</td>
<td>Mobility in soil</td>
</tr>
<tr>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>12.5</td>
<td>PBT and vPvB assessment</td>
</tr>
<tr>
<td>This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) at levels of 0.1% or higher.</td>
<td></td>
</tr>
<tr>
<td>12.6</td>
<td>Other adverse effects</td>
</tr>
<tr>
<td>Discharge into the environment must be avoided.</td>
<td></td>
</tr>
</tbody>
</table>
13 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

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
H301 Toxic if swallowed
H311 Toxic in contact with skin
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H331 Toxic if inhaled
H341 Suspected of causing genetic defects
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>Acute Tox. dermal. 3</td>
<td>Acute toxicity, dermal, Category 3</td>
</tr>
<tr>
<td>Acute Tox. inhal. 3</td>
<td>Acute toxicity, inhaled, Category 3</td>
</tr>
<tr>
<td>Acute Tox. oral. 3</td>
<td>Acute toxicity, oral, Category 3</td>
</tr>
<tr>
<td>Carc. 1B</td>
<td>Carcinogenicity, Category 1B</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Muta. 2</td>
<td>Germ cell mutagenicity, Category 2</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion or irritation, Category 1B</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Sensitisation, Skin, Category 1</td>
</tr>
</tbody>
</table>

**Further Information**

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