1. Identification

GHS Product Identifier: AURAMINE O Stain

Company Name: CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

Address: 38 - 50 Bedford Street GILLMAN SA 5013 Australia

Telephone/Fax Number: Tel: (08) 8440-2000  Fax: (08) 8440-2001

Recommended use of the chemical and restrictions on use:
Auramine O is a diarylmethane dye used as a fluorescent stain.

Other Names:
- Name: AURAMINE O Stain
- Product Code: AL089
- Other Names: 2,4,4’-(imidocarbonyl)bis(N,N-dimethylaniline) monohydrochloride, C.1. 41000, Basic Yellow 2, Auramine hydrochloride, Canary Yellow, bis[4-(dimethylamino)phenyl]methaniminium chloride

Other Information:
Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product or any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture:
- Carcinogenicity: Category 2
- Acute Toxicity - Dermal: Category 3
- Acute Toxicity - Oral: Category 4

Signal Word(s):
- DANGER

Hazard Statement(s):
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H351 Suspected of causing cancer.

Pictogram(s):
- Exclamation mark, Health hazard, Skull and crossbones

Precautionary statement – Prevention:
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response:
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P330 Rinse mouth.
- P361 Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.

3. Composition/information on ingredients
4. First-aid measures

**Inhalation**
If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Ingestion**
Wash out mouth with water and obtain medical attention.

**Skin**
Wash affected areas with copious quantities of water immediately for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention if irritation develops or persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention urgently.

**Advice to Doctor**
Treat symptomatically and supportively.

**Other Information**
For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

**Suitable extinguishing media**
Alcohol resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

**Hazchem Code**
2X

**Decomposition Temp.**
250 ºC

6. Accidental release measures

**Personal Precautions**
Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

**Personal Protection**
Wear protective clothing specified for normal operations (see Section 8)

**Clean-up Methods - Small Spillages**
Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

7. Handling and storage

**Precautions for Safe Handling**
Wash hands and face thoroughly after working with material. Use with adequate ventilation. Avoid generation or accumulation of dusts. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation of material. Keep container tightly closed when not in use.

**Conditions for safe storage, including any incompatibilities**
Keep container tightly closed. Keep in a cool, dry, well-ventilated place. Store away from incompatible substances.

**Storage Regulations**
Refer Australian Standard AS/NZS 4452:1997 ‘The storage and handling of toxic substances’.

8. Exposure controls/personal protection

**Occupational exposure limit values**
No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m3.

**Appropriate engineering controls**
In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

**Respiratory Protection**
Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

**Eye Protection**
The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Hand Protection**
Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and
AURAMINE O Stain

Classified as hazardous

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow-green powder.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>250 °C</td>
</tr>
<tr>
<td>Melting Point</td>
<td>267 °C</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>10 g/l at 20°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Negligible</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>303.83</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Stable at room temperature in closed containers under normal storage and handling conditions.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Dust generation. Incompatibles. Excess heat.</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Strong oxidising agents.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Hydrogen chloride, carbon monoxide, oxides of nitrogen, carbon dioxide</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Has not been reported.</td>
</tr>
</tbody>
</table>

11. Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity - Oral</td>
<td>Mouse LD50 = 480mg/kg</td>
</tr>
<tr>
<td>Acute Toxicity - Dermal</td>
<td>Mouse LD50 = 300 mg/kg</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause irritation of the digestive tract.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation to the respiratory tract.</td>
</tr>
<tr>
<td>Skin</td>
<td>Toxic if absorbed through the skin. May cause skin irritation.</td>
</tr>
<tr>
<td>Eye</td>
<td>May cause irritation. May cause irreversible eye injury.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Auramine (492-80-8) IARC group 2B: No data available on human carcinogenicity, however sufficient evidence of carcinogenicity in animals.</td>
</tr>
<tr>
<td>Health Hazard</td>
<td>Suspected Gastrointestinal or Liver Toxicant</td>
</tr>
<tr>
<td>Chronic Effects</td>
<td>May cause cancer according to animal studies</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No evidence of mutagenic properties.</td>
</tr>
</tbody>
</table>

12. Ecological information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Will slowly biodegrade but not bioconcentrate.</td>
</tr>
<tr>
<td>Environmental Fate</td>
<td>No information available.</td>
</tr>
<tr>
<td>Acute Toxicity - Other Organisms</td>
<td>Terrestrial: May undergo covalent chemical bonding with humic materials which can result in its chemical alteration to a latent form and tight adsorption. When covalently bound in this latent form, leaching in soil systems is not expected to occur. Aquatic: May undergo covalent bonding with humic materials in the water column and sediment.</td>
</tr>
</tbody>
</table>
### Safety Data Sheet

**Product Name:** AURAMINE O Stain

**Issue Date:** October 2014

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#### 13. Disposal considerations

**Disposal Considerations:** Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.

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#### 14. Transport information

**Transport Information:** Dangerous Goods of Class 6 Toxic and Infectious Substances are incompatible in a placard load with any of the following: - Class 1, Class 3, if the Class 3 dangerous goods are nitromethane, Class 8, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, and are incompatible with food packaging in any quantity.

**U.N. Number:** 2811

**UN proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S.

**Transport hazard class(es):** 6.1

**Hazchem Code:** 2X

**Packaging Method:** III

**Packing Group:** 6B5

**EPG Number:** 36

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#### 15. Regulatory information

**Regulatory Information:** Listed in the Australian Inventory of Chemical Substances (AICS).

**Poisons Schedule:** Not Scheduled

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#### 16. Other Information

**Date of preparation or last revision of SDS:** October 2009

**Literature References:**

- 'Standard for the Uniform Scheduling of Medicines and Poisons No. 4', Commonwealth of Australia, June 2013.
- 'Labelling of Hazardous Workplace Chemicals, Code of Practice' Safe Work Australia.
- Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.
- Safe Work Australia, 'Hazardous Substances Information System, 2005'.
- Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'.

- Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1986)]'.

**Contact Person/Point:** Paul McCarthy Ph. (08) 8440 2000

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