MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form: Substance
CAS-No.: 1667-99-8
Product code: 02810
Chemical structure:

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

1.2.1. Relevant identified uses

Industrial/Professional use spec: Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number: + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2: H319
Skin corrosion/irritation, Category 2: H315
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation: H335

Full text of H statements: see section 16
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Xi; R36/37/38
Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

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

Hazard pictograms (CLP): GHS07

Signal word (CLP): Warning
Hazard statements (CLP):
   H315 - Causes skin irritation.
   H319 - Causes serious eye irritation.
   H335 - May cause respiratory irritation.

Precautionary statements (CLP):
   P261 - Avoid breathing vapours, spray, dust, fume, gas.
   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: CHROMAZUROL S
CAS-No.: 1667-99-8

Full text of R- and 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 after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
### First-aid measures after skin contact
- Wash with plenty of water/.... Wash contaminated clothing before reuse. 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. Get medical advice/attention.

### First-aid measures after ingestion
- Rinse mouth. Do not induce vomiting.

### Most important symptoms and effects, both acute and delayed
#### Symptoms/effects after inhalation
- May cause respiratory irritation.

#### Symptoms/effects after skin contact
- Causes skin irritation.

#### Symptoms/effects after eye contact
- Causes serious eye irritation.

### Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.

### Firefighting measures
#### Extinguishing media
- Unsuitable extinguishing media: Do not use a heavy water stream.

#### Special hazards arising from the substance or mixture
- No additional information available

### Advice for firefighters
- Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

### Accidental release measures
#### Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel
- Emergency procedures: Evacuate unnecessary personnel.

##### For emergency responders
- Protective equipment: Use personal protective equipment as required.
- Emergency procedures: Ventilate area.

#### Environmental precautions
- Avoid release to the environment.

#### Methods and material for containment and cleaning up
- Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

### Handling and storage
#### Precautions for safe handling
- Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours.

#### Hygiene measures
- Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### Conditions for safe storage, including any incompatibilities
- Storage conditions: Keep container tightly closed. Store in a well-ventilated place.

#### 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

<table>
<thead>
<tr>
<th>Protection</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>Protective gloves</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Chemical goggles or safety glasses</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear suitable protective clothing</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>[In case of inadequate ventilation] wear respiratory protection.</td>
</tr>
</tbody>
</table>

SECTION 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>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>605.29 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>Brownish black powder</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</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>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</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 vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble in water</td>
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<tr>
<td>Log Pow</td>
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</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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
No additional information available

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Air contact. Direct sunlight. Moisture.

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.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Not classified
STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available
12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information 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
No additional information available

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>14.1. UN number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No. (ADR)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (IMDG)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (IATA)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (ADN)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN-No. (RID)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.2. UN proper shipping name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name (ADR)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (IMDG)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (IATA)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (ADN)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (RID)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.3. Transport hazard class(es)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IATA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ADN</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
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
  No data available
- Transport by sea
  No data available
- Air transport
  No data available
- Inland waterway transport
  No data available
- Rail transport
  No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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
CHROMAZUROL S is not on the REACH Candidate List
CHROMAZUROL S is not on the REACH Annex XIV List

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV
Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>R36/37/38</td>
<td>Irritating to eyes, respiratory system and skin</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
</tbody>
</table>

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.