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

1.1 Product Identifiers
Product Number: M583
Product Name: K.R.A.N.E.P. Agar Base
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

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.: +91-22-25002468
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]
Acute toxicity, Oral, (Category 4), H302
Acute toxicity, Inhaled, (Category 4), H332
Hazardous to the aquatic environment, long term hazard, (Category 3), H412

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

Pictogram
Signal word: Warning
Hazard Statement(s)
H302: Harmful if swallowed
H332: Harmful if inhaled
H412: Harmful to aquatic life with long lasting effects

Precautionary Statement(s)
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312: IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
Avoid release to the environment.

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>Potassium thiocyanate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=30.0 - &lt;=40.0%</td>
</tr>
<tr>
<td>CAS No.: 333-20-0</td>
<td>Acute Tox.oral 4; Acute Tox. dermal. 4; Acute Tox.inhal. 4; Aquatic Chronic 3</td>
<td></td>
</tr>
<tr>
<td>EC No.: 206-370-1</td>
<td>H302; H312; H332; H412</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium chloride</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No.: 7447-41-8</td>
<td>Acute Tox.oral 4; Eye Irrit. 2A; STOT SE 3; Skin Irrit. 2</td>
<td></td>
</tr>
<tr>
<td>EC No.: 231-212-3</td>
<td>H302; H319; H335; H315</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No.: 26628-22-8</td>
<td>Acute Tox.oral. 2; Acute Tox. 1; Aquatic Acute 1; Aquatic Chronic 1</td>
<td></td>
</tr>
<tr>
<td>EC No.: 247-852-1</td>
<td>H300; H310; H400; H410</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycloheximide</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No.: 66-81-9</td>
<td>Acute Tox. oral 1,2; Skin Irrit. 2; Muta. 2; Repr. 1B; Aquatic Chronic 2</td>
<td></td>
</tr>
<tr>
<td>EC No.: 200-636-0</td>
<td>H300; H315; H341; H360D; H411</td>
<td></td>
</tr>
<tr>
<td>Index-No : 613-140-00-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes and its 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**
- Lithium oxides, Carbon oxides, Sodium oxides, Hydrogen chloride gas, Potassium oxides, Sulphur oxides, Nitrogen oxides (NOx)

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 2016/425/EEC and the standard EN ISO 374-1/2016 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>Cream to yellow coloured homogeneous free flowing powder</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>6.60 - 7.00</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>
</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**
REFER SECTION 2

**Skin**
REFER SECTION 2

**Eyes**
REFER SECTION 2

**Ingestion**
REFER SECTION 2

**Additional Information**
RTECS : No data Available

11.2 **Components**

**Potassium thiocyanate**

*Acute oral toxicity*
Mouse LD50: 594 mg/kg
Mouse LD50: 590 mg/kg
Rat LD50: 854 mg/kg
Human oral TDLo: 428 mg/kg
Toxic psychosis, hallucinations, distorted perceptions, gastritis
Human oral LDLo: 80 mg/kg
hallucinations, distorted perceptions, convulsions, muscle weakness.
Rabbit oral LDLo: 500 mg/kg
Guinea pig oral LDLo: 600 mg/kg
Frog oral LDLo: 300 mg/kg

**Carcinogenicity**
Not listed by ACGIH, IARC, NTP or CA Prop 65.

**Teratogenicity**
No information available

**Additional information**
RTECS : XL1925000

**Lithium chloride**

*Acute oral toxicity*
Rat LD50: 526 mg/kg(As per RTECS)

*Acute inhalation toxicity*
Rat LC50: >5.57 mg/l; 4 h; aerosol
(As per OECD Test Guideline 403)

*Acute dermal toxicity*
Rat LD50: >2.000 mg/kg
(As per OECD Test Guideline 403)

**Skin irritation**
Rabbit
Result:Irritations(As per IUCLID)

**Eye irritation**
Rabbit
Result: Eye irritation (As per IUCLID)

Germ cell mutagenicity
Genotoxicity in vitro
Ames test
Result: Negative

Additional Information:
RTECS: OJ5950000

Sodium azide
Acute oral toxicity
Rat LD50: 27mg/kg (As per RTECS)

Acute dermal toxicity
LD50 Rabbit: 20mg/kg (As per RTECS)

Additional Information:
RTECS: VY8050000

Cycloheximide
Acute Toxicity
LD50 Oral rat: 2mg/kg

Skin Corroison/Irritation
Skin-rabbit Result - Skin irritation-24 h

Germ cell mutagenicity
Lab experiments have shown mutagenic effects
Invitro tests showed mutagenic effects

Reproductive toxicity
May cause congenital malformation in the fetus.
Presumed human reproductive toxicant.
Liver-irregularities-Based on human Evidence

Additional Information
RTECS: MA4375000

Chloramphenicol
Acute Toxicity
LD50 Oral rat: 2.500 mg/kg
LD50 Intraperitoneal rat: 1.811 mg/kg
LD50 Intraperitoneal mouse: 1.100 mg/kg

Respiratory or skin sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals

Germ cell mutagenicity
Lab experiments have shown mutagenic effects  
*Possible human carcinogen*  
IARC: Group 2A Probably carcinogenic to humans (Chloramphenicol)  
*Reproductive toxicity*  
May cause congenital malformation in the fetus.  
Presumed human reproductive toxicant.  
Liver-irregularities-Based on human Evidence  
A Dose of about 1 gram can cause: Nausea, burning sensation, sores in the mouth, lesions of the throat, sores in the digestive tract, tremors, convulsions Shock ., Death may result from ingestion of two to five grams., Prolonged or repeated exposure may cause; Increased; bone density, calcium deposits in the ligaments, new bone growth, vomiting, diarrhea, abdominal pain. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Additional Information**  
RTECS: AB6825000

---

**12  Ecological Information**  
**12.1 Toxicity**  
No data available for this mixture  
**Components:**  
**Potassium thiocyanate**  
*Toricity to fish*  
*Salvelinus fontinalis (Flow through test)* LC50: > 27.9 mg/L; 96h  
*Oncorhynchus mykiss (rainbow trout)* LC50: 11 mg/l; 96 h  
*Toricity to aquatic invertebrates*  
*Daphnia magna (Water flea)*  
LC50: 0.629 - <= 32.088 mg/L; 96h (Static test)  
EC50: 2.8 mg/l; 96 h  
*Toricity to aquatic algae and cyanobacteria*  
*Microcystis aeruginosa (Static test)* EC50: 47 mg/L; 72h  
*Toricity to other aquatic organisms*  
*Pandalus montagui (pink shrimp)* LC50: > 6.2 mg/L; 48h

**Components:**  
**Lithium Chloride**  
*Toricity to Fish*  
LC50 Oncorhynchus mykiss (rainbow trout): 158 mg/l; 96 h  
(Static test, As per OECD Test Guideline 203)  
*Toricity to Daphnia*  
EC50 Daphnia magna (water flea): 249 mg/l; 48 h
(Static test, As per OECD Test Guideline 202)

Toxicity to Algae
EC50 Desmodesmus subspicatus (green algae):
Static test > 400 mg/l; 72 h
(Static test, As per OECD Test Guideline 201)

Components:
Sodium azide

Toxicity to fish
LC50 Lepomis macrochirus (Bluegill sunfish): 0.7 mg/l; 96 h

Toxicity to Daphnia
EC50 Daphnia pulex (Water flea): 4.2 mg/l; 48 h

Toxicity to algae
IC50 mixed culture of green algae: 272 mg/l

Toxicity to bacteria
EC50 Photobacterium phosphoreum: 38.5 mg/l

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
No data available

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
ADNR : No  ADR : No  IMDG : Marine pollutant  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
H300  Fatal if swallowed
H302  Harmful if swallowed
H310  Fatal in contact with skin
H312  Harmful in contact with skin
H315  Causes skin irritation
H319  Causes serious eye irritation
H332  Harmful if inhaled
H335  May cause respiratory irritation
H341  Suspected of causing genetic defects
H360D  May damage the unborn child
H400  Very toxic to aquatic life
H410  Very toxic to aquatic life with long lasting effects
H411  Toxic to aquatic life with long lasting effects
H412  Harmful to aquatic life with long lasting effects
Acute Tox. 1  Acute toxicity, dermal, Category 1
Acute Tox. dermal. 4  Acute toxicity, dermal, Category 4
Acute Tox. oral 1,2  Acute toxicity, oral, Category 1, 2
Acute Tox.inhal. 4  Acute toxicity, inhaled, Category 4
Acute Tox.oral 4  Acute toxicity, oral, Category 4
Acute Tox.oral. 2  Acute toxicity, oral, Category 2
Aquatic Acute 1  Hazardous to the aquatic environment, acute hazard, Category 1
Aquatic Chronic 1  Hazardous to the aquatic environment, long term hazard, Category 1
Aquatic Chronic 2  Hazardous to the aquatic environment, long term hazard, Category 2
Aquatic Chronic 3  Hazardous to the aquatic environment, long term hazard, Category 3
Eye Irrit. 2A  Serious eye damage or eye irritation, Category 2A
Muta. 2  Germ cell mutagenicity, Category 2
Repr. 1B  Reproductive toxicity, Category 1B
Skin Irrit. 2  Skin corrosion or irritation, Category 2
STOT SE 3  Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information

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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.