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

| | |
|---|---|
| **Catalogue Number** | CS-T-29198 |
| **Product Name** | Imidazolidinyl urea |
| **CAS No.** | 39236-46-9 |
| **Category** | Fine Chemicals |
| **Synonyms** | N,N″-Methylenebis[N′-[3-(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl]urea] (ACI);<br>1,1′-Methylenebis(3-(3-(hydroxymethyl)-2,5-dioxoimidazolidin-4-yl)urea) |
| **Brand** | Clearsynth Labs Ltd. |
| **Identified uses** | Laboratory Chemicals |
| **Uses advised against** | Not available |
| **Company** | Clearsynth Labs Ltd.<br>Mumbai, India |
| **Emergency Phone #** | +91-22-245045900 |
| **REACH No.** | Not available |

## SECTION 2: Hazards identification

**Disclaimer:** This is sample MSDS. Please email **sales@clearsynth.com** for more details.

### 2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin irritation (Category 2)
Serious eye damage/eye irritation (Category 2)

### 2.2 Label Elements

**Signal Word:** Warning

**Hazard Statement(s)**

| Code | Statement |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H315 | Causes skin irritation. |

| | |
|---|---|
| H319 | Causes serious eye irritation. |

**Precautionary Statement(s)**

| Code | Statement |
|---|---|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P272 | Not available |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P321 | Specific treatment (see … on this label). |
| P333+P317 | Not available |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulatio |
| P264 | Wash hands thoroughly after handling. |
| P264+P265 | Not available |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen |
| P332+P317 | If skin irritation occurs: Get medical help. |
| P337+P317 | If eye irritation persists: Get medical help. |

## SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Imidazolidinyl urea
CAS Number : 39236-46-9
Molecular Formula : C11H16N8O8
Molecular Weight : 388.29
Parent Chemical : -
Synonyms : N,N″-Methylenebis[N′-[3-(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl]urea] (ACI);
1,1′-Methylenebis(3-(3-(hydroxymethyl)-2,5-dioxoimidazolidin-4-yl)urea)
Concentration : Not available

## SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms persist.
Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
Skin contact: Wash with plenty of soap and water. Get medical attention if irritation develops or persists.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
Not available.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically. No data available.

## SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical, carbon dioxide.
Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
May decompose under fire conditions to release irritating and/or toxic fumes. Specific decomposition products: Not available.

5.3 Advice for firefighters
Wear self-contained breathing apparatus (SCBA) and full protective gear. Use water spray to cool unopened containers. Avoid inhalation of combustion products.

## SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing dust. Use appropriate personal protective equipment.

6.2 Environmental precautions
Avoid release to the environment. Prevent entry into drains, surface water, or soil.

6.3 Methods and material for containment and cleaning up
Contain spill. Sweep up or collect using methods that minimize dust generation and place in suitable, labeled container for disposal. Clean spill area with water if appropriate.

6.4 Reference to other sections
See Section 8 for personal protective equipment and Section 13 for disposal considerations.

## SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid breathing dust. Provide adequate ventilation. Keep container tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Protect from moisture. Keep away from incompatible materials.
Incompatible materials: Not available.

7.3 Specific end use(s)
Fine chemical. Specific uses: Not available.

## SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits: No data available.
Biological limit values: Not available.

8.2 Exposure controls
Engineering controls: Use local exhaust ventilation or general ventilation to minimize airborne concentrations.
Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves. Wear protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate or dust is generated, use a suitable particulate respirator in accordance with applicable standards.
- Hygiene measures: Wash hands after handling. Remove contaminated clothing and wash before reuse.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| Test | Result |
|---|---|
| Appearance | No data available |
| IR spectrum | No data available |
| pH | No data available |
| Solubility | No data available |

| Property | Value |
|---|---|
| a) Physical State | No data available |
| b) Color | No data available |
| c) Odor | No data available |
| d) pH | No data available |
| e) Vapour Pressure | No data available |
| f) Viscosity | No data available |

| Property | Value |
|---|---|
| g) Initial Boiling Point and boiling range | No data available |
| h) Melting Point / Freezing Point | No data available |
| i) Auto Ignition Temperature | No data available |
| j) Flash Point | No data available |
| k) Explosion Limit, Lower | No data available |
| l) Explosion Limit, Upper | No data available |
| m) Decomposition Temperature | No data available |
| n) Loss on Drying | No data available |
| o) Relative Density | No data available |
| p) Solubility (in DMSO) | No data available |
| q) Oxidizing Properties | No data available |

## SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Excessive heat. Moisture (if applicable). Dust generation.

10.5 Incompatible materials
Not available.

10.6 Hazardous decomposition products
Not available.

## SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Imidazolidinyl urea is a formaldehyde releaser. It is likely that formaldehyde toxicity occurs when intracellular levels saturate formaldehyde dehydrogenase activity, allowing the unmetabolized intact molecule to exert its effects. Formaldehyde is known to form cross links between protein and DNA and undergo metabolic incorporation into macromolecules (DNA, RNA, and proteins). Imidazolidinyl urea is also a nitrosating agent. Nitrosating agents may decompose and/or react to cause nitrosamine contamination. Nitrosamines are produced

from secondary amines and amides in the presence of nitrite ions and are believed to be carcinogenic. Once in the body, nitrosamines are activated by cytochrome P-450 enzymes. They are then believed to induce their carcinogenic effects by forming DNA adducts at the N- and O-atoms. (L962, L1889, L1890, A2878, A2879, A2880, L1894) LC50 (rat) > 5,000 mg/m3/1hr
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: Imidazolidinyl urea is a formaldehyde releaser. It is likely that formaldehyde toxicity occurs when intracellular levels saturate formaldehyde dehydrogenase activity, allowing the unmetabolized intact molecule to exert its effects. Formaldehyde is known to form cross links between protein and DNA and undergo metabolic incorporation into macromolecules (DNA, RNA, and proteins). Imidazolidinyl urea is also a nitrosating agent. Nitrosating agents may decompose and/or react to cause nitrosamine contamination. Nitrosamines are produced from secondary amines and amides in the presence of nitrite ions and are believed to be carcinogenic. Once in the body, nitrosamines are activated by cytochrome P-450 enzymes. They are then believed to induce their carcinogenic effects by forming DNA adducts at the N- and O-atoms. (L962, L1889, L1890, A2878, A2879, A2880, L1894) Imidazolidinyl urea releases formaldehyde, a known human carcinogen. It may also react to produce nitrosamines, which are believed to be carcinogenic. (L962, L1890, L1894)
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- Imidazolidinyl urea is a formaldehyde releaser. It is likely that formaldehyde toxicity occurs when intracellular levels saturate formaldehyde dehydrogenase activity, allowing the unmetabolized intact molecule to exert its effects. Formaldehyde is known to form cross links between protein and DNA and undergo metabolic incorporation into macromolecules (DNA, RNA, and proteins). Imidazolidinyl urea is also a nitrosating agent. Nitrosating agents may decompose and/or react to cause nitrosamine contamination. Nitrosamines are produced from secondary amines and amides in the presence of nitrite ions and are believed to be carcinogenic. Once in the body, nitrosamines are activated by cytochrome P-450 enzymes. They are then believed to induce their carcinogenic effects by forming DNA adducts at the N- and O-atoms. (L962, L1889, L1890, A2878, A2879, A2880, L1894)

## SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
No data available.

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 Results of PBT and vPvB assessment
Not available.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

## SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/container in accordance with local/regional/national/international regulations. Do not discharge to drains.
Contaminated packaging: Dispose of as unused product or according to local requirements.
Waste code: Not available.

## SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
Not available.

14.2 UN proper shipping name
Not available.

14.3 Transport hazard class(es)
Not available.

14.4 Packing group
Not available.

14.5 Environmental hazards
Not available.

14.6 Special precautions for user
Not available.

14.7 Transport in bulk according to IMO instruments
Not available.

## SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not available.

15.2 Chemical safety assessment
No data available.

## SECTION 16: Other information

SECTION 16: Other information

Product name: Imidazolidinyl urea
Catalog No.: CS-T-29198
CAS No.: 39236-46-9
Molecular weight: 388.29
Supplier: Clearsynth Labs Ltd., Mumbai, India
Emergency phone: +91-22-245045900

Revision date: Not available

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