

**CAS-No.: 563-47-3 MSDS**

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Substance  
:  
EC Index-No. : 602-032-00-6  
EC-No. : 209-251-2  
CAS-No. : 563-47-3  
Product code : 05684

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries  
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,  
Ludhiana Pb. (141007)  
+91 9316777775, +91 7707855700  
[sales@labogens.com](mailto:sales@labogens.com) - [www.Labogens.com](http://www.Labogens.com)

#### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (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]

Acute toxicity (oral), H301  
Category 3

Full text of H statements : see section 16

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R25

Full text of R-phrases: see section 16

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### 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)

:



GHS06

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301 - Toxic if swallowed.

Precautionary statements (CLP)

: P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

|              |                                  |
|--------------|----------------------------------|
| Name         | : SEMICARBAZIDE HYDROCHLORIDE AR |
| CAS-No.      | : 563-47-3                       |
| EC-No.       | : 209-251-2                      |
| EC Index-No. | : 602-032-00-6                   |

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. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.                    |
| First-aid measures after skin contact | : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.                                                                            |
| First-aid measures after eye contact  | : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER/doctor. Specific treatment (see supplemental first aid instruction on this label).           |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                  |                       |
|----------------------------------|-----------------------|
| Symptoms/effects after ingestion | : Toxic if swallowed. |
|----------------------------------|-----------------------|

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### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Stop release.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

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### 8.2. Exposure controls

|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| Hand protection          | : protective gloves                                                |
| Eye protection           | : Chemical goggles or safety glasses                               |
| Skin and body protection | : Wear suitable protective clothing                                |
| Respiratory protection   | : [In case of inadequate ventilation] wear respiratory protection. |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                            |                           |
|--------------------------------------------|---------------------------|
| Physical state                             | : Solid                   |
| Colour                                     | : White crystalline.      |
| Odour                                      | : No data available       |
| Odour threshold                            | : No data available       |
| pH                                         | : No data available       |
| Relative evaporation rate (butylacetate=1) | : No data available       |
| Melting point                              | : 175 - 177               |
| Freezing point                             | : No data available       |
| Boiling point                              | : No data available       |
| Flash point                                | : No data available       |
| Auto-ignition temperature                  | : No data available       |
| Decomposition temperature                  | : No data available       |
| Flammability (solid, gas)                  | : No data available       |
| Vapour pressure                            | : No data available       |
| Relative vapour density at 20 °C           | : No data available       |
| Relative density                           | : No data available       |
| Solubility                                 | : Water: 100 g/l at 20 °C |
| Log Pow                                    | : No data available       |
| Viscosity, kinematic                       | : No data available       |
| Viscosity, dynamic                         | : No data available       |
| Explosive properties                       | : No data available       |
| 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

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### 10.2. Chemical stability

May cause fire or explosion; strong oxidiser.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Overheating. Air contact. 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 : Oral: Toxic if swallowed.

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed.

## 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

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### 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

|                                            |                                                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Ecology - waste materials                  | : Hazardous waste due to toxicity.                                                                                                                            |

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 2811 |
| UN-No. (IMDG) | : 2811 |
| UN-No. (IATA) | : 2811 |
| UN-No. (ADN)  | : 2811 |
| UN-No. (RID)  | : 2811 |

### 14.2. UN proper shipping name

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| Proper Shipping Name (ADR)            | : TOXIC SOLID, ORGANIC, N.O.S.                        |
| Proper Shipping Name (IMDG)           | : TOXIC SOLID, ORGANIC, N.O.S.                        |
| Proper Shipping Name (IATA)           | : Toxic solid, organic, n.o.s.                        |
| Proper Shipping Name (ADN)            | : TOXIC SOLID, ORGANIC, N.O.S.                        |
| Proper Shipping Name (RID)            | : TOXIC SOLID, ORGANIC, N.O.S.                        |
| Transport document description (ADR)  | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III, (E) |
| Transport document description (IMDG) | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III      |
| Transport document description (IATA) | : UN 2811 Toxic solid, organic, n.o.s., 6.1, III      |
| Transport document description (ADN)  | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III      |
| Transport document description (RID)  | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III      |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |       |
|----------------------------------|-------|
| Transport hazard class(es) (ADR) | : 6.1 |
| Danger labels (ADR)              | : 6.1 |



#### IMDG

|                                   |       |
|-----------------------------------|-------|
| Transport hazard class(es) (IMDG) | : 6.1 |
|-----------------------------------|-------|

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Danger labels (IMDG) : 6.1



### IATA

Transport hazard class(es) (IATA) : 6.1

Hazard labels (IATA) : 6.1



### ADN

Transport hazard class(es) (ADN) : 6.1

Danger labels (ADN) : 6.1



### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



#### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

#### 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

Classification code (ADR) : T2

Special provisions (ADR) : 274, 614

Limited quantities (ADR) : 5kg

Excepted quantities (ADR) : E1

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|                                                                         |                           |
|-------------------------------------------------------------------------|---------------------------|
| Packing instructions (ADR)                                              | : P002, IBC08, LP02, R001 |
| Special packing provisions (ADR)                                        | : B3                      |
| Mixed packing provisions (ADR)                                          | : MP10                    |
| Portable tank and bulk container instructions (ADR)                     | : T1                      |
| Portable tank and bulk container special provisions (ADR)               | : TP33                    |
| Tank code (ADR)                                                         | : SGAH, L4BH              |
| Tank special provisions (ADR)                                           | : TU15, TE19              |
| Vehicle for tank carriage                                               | : AT                      |
| Transport category (ADR)                                                | : 2                       |
| Special provisions for carriage - Bulk (ADR)                            | : VC1, VC2, AP7           |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13, CV28              |
| Special provisions for carriage - Operation (ADR)                       | : S9                      |
| Hazard identification number (Kemler No.)                               | : 60                      |
| Orange plates                                                           | :                         |



|                               |      |
|-------------------------------|------|
| Tunnel restriction code (ADR) | : E  |
| EAC code                      | : 2X |

### - Transport by sea

|                                    |                                                         |
|------------------------------------|---------------------------------------------------------|
| Special provisions (IMDG)          | : 223, 274                                              |
| Packing instructions (IMDG)        | : P002                                                  |
| IBC packing instructions (IMDG)    | : IBC08                                                 |
| IBC special provisions (IMDG)      | : B3                                                    |
| Tank instructions (IMDG)           | : T1                                                    |
| Tank special provisions (IMDG)     | : TP33                                                  |
| EmS-No. (Fire)                     | : F-A                                                   |
| EmS-No. (Spillage)                 | : S-A                                                   |
| Stowage category (IMDG)            | : A                                                     |
| Properties and observations (IMDG) | : Toxic if swallowed, by skin contact or by inhalation. |
| MFAG-No                            | : 154                                                   |

### - Air transport

|                                              |          |
|----------------------------------------------|----------|
| PCA Excepted quantities (IATA)               | : E1     |
| PCA Limited quantities (IATA)                | : Y645   |
| PCA limited quantity max net quantity (IATA) | : 10kg   |
| PCA packing instructions (IATA)              | : 670    |
| PCA max net quantity (IATA)                  | : 100kg  |
| CAO packing instructions (IATA)              | : 677    |
| CAO max net quantity (IATA)                  | : 200kg  |
| Special provisions (IATA)                    | : A3, A5 |
| ERG code (IATA)                              | : 6L     |

### - Inland waterway transport

|                           |                 |
|---------------------------|-----------------|
| Classification code (ADN) | : T2            |
| Special provisions (ADN)  | : 274, 614, 802 |
| Limited quantities (ADN)  | : 5 kg          |
| Excepted quantities (ADN) | : E1            |
| Carriage permitted (ADN)  | : T             |

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Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### - Rail transport

Classification code (RID) : T2  
Special provisions (RID) : 274, 614  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P002, IBC08, LP02, R001  
Special packing provisions (RID) : B3  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T1  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAH, L4BH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage – Bulk (RID) : VC1, VC2, AP7  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE11  
Hazard identification number (RID) : 60

### 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

SEMICARBAZIDE HYDROCHLORIDE AR is not on the REACH Candidate List

SEMICARBAZIDE HYDROCHLORIDE AR is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to AwSV; ID No. 1196)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

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

|                     |                                   |
|---------------------|-----------------------------------|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| H301                | Toxic if swallowed.               |
| R25                 | Toxic if swallowed                |
| T                   | Toxic                             |

*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*