



# Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,  
as amended by Regulation (EU) 2020/878

## Semax

|               |                       |
|---------------|-----------------------|
| Product name  | Semax                 |
| SDS number    | ADRIA-SDS-029-SEMAX   |
| Version       | 1.0                   |
| Issue date    | 01 June 2026          |
| Revision date | 01 June 2026          |
| Supersedes    | New safety data sheet |
| Language      | English               |

### SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

|                              |                                                                                                                                                                          |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Product identifier       | Product name: Semax<br>CAS No.: 80714-61-0<br>Substance type: Research compound                                                                                          |
| 1.2 Relevant identified uses | Laboratory reagent for research, analytical, educational, and R&D use only, where permitted by applicable law.                                                           |
| Uses advised against         | Not for human or animal use. Not for use as a food, drug, cosmetic, dietary supplement, diagnostic product, therapeutic product, clinical product, or household product. |
| 1.3 Supplier                 | Adria Science<br>Telephone: +386 71 483 246<br>Email: info@adriascience.com                                                                                              |
| 1.4 Emergency telephone      | Emergency services: 112 (EU, 24 hours)<br>Product information: +386 71 483 246 (business hours)<br>Email: info@adriascience.com                                          |

### SECTION 2: Hazards Identification

|                    |                                                                                                                                                                                          |                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 2.1 Classification | Classification according to Regulation (EC) No 1272/2008 (CLP):<br>Acute toxicity, oral - Category 4 (H302)<br>Skin irritation - Category 2 (H315)<br>Eye irritation - Category 2 (H319) |                                                                                                      |
| 2.2 Label elements | See label elements below.                                                                                                                                                                |                                                                                                      |
| Hazard pictogram   |                                                                                                       | GHS07 - Exclamation mark                                                                             |
| Signal word        |                                                                                                                                                                                          | Warning                                                                                              |
| Hazard statements  |                                                                                                                                                                                          | H302: Harmful if swallowed.<br>H315: Causes skin irritation.<br>H319: Causes serious eye irritation. |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautionary statements</b> | <p>P264: Wash hands and exposed skin thoroughly after handling.</p> <p>P270: Do not eat, drink or smoke when using this product.</p> <p>P280: Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.</p> <p>P330: Rinse mouth.</p> <p>P302+P352: IF ON SKIN: Wash with plenty of water.</p> <p>P332+P313: If skin irritation occurs: Get medical advice/attention.</p> <p>P362+P364: Take off contaminated clothing and wash it before reuse.</p> <p>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337+P313: If eye irritation persists: Get medical advice/attention.</p> <p>P501: Dispose of contents/container in accordance with local, regional, national and international regulations.</p> |
| <b>2.3 Other hazards</b>        | This research material has not been fully characterized toxicologically. No data are available to conclude that the substance/mixture meets PBT or vPvB criteria under Annex XIII of Regulation (EC) No 1907/2006. No endocrine-disrupting properties have been identified from available information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

### SECTION 3: Composition/Information on Ingredients

| <b>3.1 Substances/Mixtures</b> | Composition information is provided for the supplied product identity. |              |              |                  |                       |
|--------------------------------|------------------------------------------------------------------------|--------------|--------------|------------------|-----------------------|
| Component                      | CAS No.                                                                | EC No.       | Formula      | Molecular weight | Concentration         |
| Semax                          | 80714-61-0                                                             | Not assigned | C37H51N9O10S | 813.92 g/mol     | Substance as supplied |
| <b>Sequence / identity</b>     | Met-Glu-His-Phe-Pro-Gly-Pro                                            |              |              |                  |                       |
| <b>Physical appearance</b>     | White to off-white lyophilized powder                                  |              |              |                  |                       |
| <b>Salt/form</b>               | Acetate or supplier-specified salt                                     |              |              |                  |                       |
| <b>Purity</b>                  | Analytical purity reported per lot                                     |              |              |                  |                       |

### SECTION 4: First Aid Measures

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>4.1 Description</b>         | <p><b>General advice:</b> Remove exposed person from exposure. Show this safety data sheet to medical personnel. Treat symptomatically.</p> <p><b>Inhalation:</b> Move to fresh air. Seek medical attention if breathing difficulty, irritation, or other symptoms occur.</p> <p><b>Skin contact:</b> Remove contaminated clothing. Wash skin with soap and plenty of water. Seek medical attention if irritation occurs.</p> <p><b>Eye contact:</b> Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.</p> <p><b>Ingestion:</b> Rinse mouth. Do not induce vomiting unless instructed by medical personnel. Call a poison centre or doctor if unwell.</p> |
| <b>4.2 Symptoms/effects</b>    | May cause skin irritation, serious eye irritation, and harmful effects if swallowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>4.3 Immediate treatment</b> | No specific antidote known. Provide supportive and symptomatic treatment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### SECTION 5: Firefighting Measures

|                                    |                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>5.1 Extinguishing media</b>     | Suitable media: water spray, dry chemical, carbon dioxide (CO <sub>2</sub> ), or alcohol-resistant foam. Use extinguishing media suitable for surrounding fire. No unsuitable media known. |
| <b>5.2 Special hazards</b>         | Thermal decomposition or combustion may produce carbon oxides, nitrogen oxides, and other irritating or toxic fumes.                                                                       |
| <b>5.3 Advice for firefighters</b> | Wear self-contained breathing apparatus and full protective clothing. Prevent contaminated fire-extinguishing water from entering drains or the environment where possible.                |

### SECTION 6: Accidental Release Measures

|                                      |                                                                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>6.1 Personal precautions</b>      | Avoid dust formation. Avoid inhalation, ingestion, skin contact, and eye contact. Wear protective equipment as described in Section 8. |
| <b>6.2 Environmental precautions</b> | Do not allow material to enter drains, surface water, groundwater, or soil.                                                            |

| <b>6.3 Cleanup methods</b>                              | Collect dry material carefully using methods that minimize dust generation. Use a HEPA-filtered vacuum or damp wipe where appropriate. Place in a suitable closed container for disposal.                          |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>6.4 Reference</b>                                    | See Sections 8 and 13.                                                                                                                                                                                             |
| <b>SECTION 7: Handling and Storage</b>                  |                                                                                                                                                                                                                    |
| <b>7.1 Safe handling</b>                                | Handle only by trained personnel in a properly equipped laboratory. Avoid breathing dust. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke while handling. Wash thoroughly after handling. |
| <b>7.2 Storage</b>                                      | Lyophilized: -20 deg C long term; protect from moisture. Prepared solutions: 2-8 deg C short-term laboratory handling.                                                                                             |
| <b>7.3 Specific end use</b>                             | Laboratory research and analytical use only.                                                                                                                                                                       |
| <b>SECTION 8: Exposure Controls/Personal Protection</b> |                                                                                                                                                                                                                    |
| <b>8.1 Control parameters</b>                           | No occupational exposure limit values are established for Semax.                                                                                                                                                   |
| <b>8.2 Engineering controls</b>                         | Use adequate ventilation. Handle powders in a fume hood, local exhaust enclosure, or equivalent containment when dust may be generated.                                                                            |
| <b>Eye/face protection</b>                              | Wear safety glasses with side shields or chemical safety goggles.                                                                                                                                                  |
| <b>Skin protection</b>                                  | Wear suitable protective gloves such as nitrile gloves. Wear a laboratory coat or protective clothing.                                                                                                             |
| <b>Respiratory protection</b>                           | Use an approved particulate respirator when risk assessment indicates dust exposure may occur.                                                                                                                     |
| <b>Hygiene measures</b>                                 | Remove contaminated clothing and protective equipment before entering eating areas. Wash hands after handling.                                                                                                     |
| <b>Environmental controls</b>                           | Avoid release to the environment.                                                                                                                                                                                  |
| <b>SECTION 9: Physical and Chemical Properties</b>      |                                                                                                                                                                                                                    |
| Property                                                | Value                                                                                                                                                                                                              |
| Physical state                                          | White to off-white lyophilized powder                                                                                                                                                                              |
| Color                                                   | White to off-white                                                                                                                                                                                                 |
| Odor                                                    | No data available                                                                                                                                                                                                  |
| Melting point/freezing point                            | No data available                                                                                                                                                                                                  |
| Boiling point                                           | No data available                                                                                                                                                                                                  |
| Flammability                                            | No data available                                                                                                                                                                                                  |
| Lower/upper explosion limit                             | No data available                                                                                                                                                                                                  |
| Flash point                                             | No data available; not applicable to supplied solid under normal conditions                                                                                                                                        |
| Auto-ignition temperature                               | No data available                                                                                                                                                                                                  |
| Decomposition temperature                               | No data available                                                                                                                                                                                                  |
| pH                                                      | No data available                                                                                                                                                                                                  |
| Kinematic viscosity                                     | Not applicable                                                                                                                                                                                                     |
| Solubility                                              | Soluble in sterile water or bacteriostatic water                                                                                                                                                                   |
| Partition coefficient n-octanol/water                   | No data available                                                                                                                                                                                                  |
| Vapor pressure                                          | No data available                                                                                                                                                                                                  |
| Density/relative density                                | No data available                                                                                                                                                                                                  |
| Relative vapor density                                  | Not applicable                                                                                                                                                                                                     |
| Granulometry/solid form                                 | No data available                                                                                                                                                                                                  |
| Molecular formula                                       | C37H51N9O10S                                                                                                                                                                                                       |
| Molecular weight                                        | 813.92 g/mol                                                                                                                                                                                                       |

## SECTION 10: Stability and Reactivity

|                             |                                                                                        |
|-----------------------------|----------------------------------------------------------------------------------------|
| 10.1 Reactivity             | No specific reactivity data available.                                                 |
| 10.2 Stability              | Stable under recommended handling and storage conditions.                              |
| 10.3 Hazardous reactions    | No hazardous reactions known under recommended conditions.                             |
| 10.4 Conditions to avoid    | Heat, light, moisture, dust generation, and repeated freeze-thaw cycles.               |
| 10.5 Incompatible materials | Strong oxidizing agents.                                                               |
| 10.6 Decomposition products | Carbon oxides and nitrogen oxides may form during thermal decomposition or combustion. |

## SECTION 11: Toxicological Information

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.1 CLP hazard classes | <b>Acute toxicity:</b> Harmful if swallowed. Quantitative toxicity values are not available.<br><b>Skin corrosion/irritation:</b> Causes skin irritation.<br><b>Serious eye damage/irritation:</b> Causes serious eye irritation.<br><b>Respiratory or skin sensitisation:</b> No data available.<br><b>Germ cell mutagenicity:</b> No data available.<br><b>Carcinogenicity:</b> No data available.<br><b>Reproductive toxicity:</b> No data available.<br><b>STOT - single exposure:</b> No data available.<br><b>STOT - repeated exposure:</b> No data available.<br><b>Aspiration hazard:</b> Not applicable to the supplied solid. |
| Routes of exposure      | Inhalation, skin contact, eye contact, ingestion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Symptoms                | May cause irritation to skin and eyes. Ingestion may be harmful.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11.2 Other information  | Endocrine-disrupting properties: no endocrine-disrupting properties identified from available information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## SECTION 12: Ecological Information

|                                |                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------|
| 12.1 Toxicity                  | No aquatic toxicity data available. Avoid release to the environment.                    |
| 12.2 Persistence/degradability | No data available.                                                                       |
| 12.3 Bioaccumulative potential | No data available.                                                                       |
| 12.4 Mobility in soil          | No data available.                                                                       |
| 12.5 PBT/vPvB assessment       | No data are available to conclude that the substance/mixture meets PBT or vPvB criteria. |
| 12.6 Endocrine disruption      | No endocrine-disrupting properties identified from available information.                |
| 12.7 Other adverse effects     | No data available.                                                                       |

## SECTION 13: Disposal Considerations

|                        |                                                                                                                                                                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13.1 Waste treatment   | Dispose of contents and container in accordance with applicable local, regional, national, and international regulations. Do not discharge into drains, surface water, groundwater, or soil. Waste classification should be determined by the waste holder based on actual material, contamination, and use. |
| Contaminated packaging | Dispose of as unused product unless fully cleaned and permitted by applicable regulations.                                                                                                                                                                                                                   |

## SECTION 14: Transport Information

| Regulation              | Classification                    |
|-------------------------|-----------------------------------|
| ADR/RID                 | Not regulated as dangerous goods. |
| IMDG                    | Not regulated as dangerous goods. |
| IATA                    | Not regulated as dangerous goods. |
| UN number               | Not applicable.                   |
| UN proper shipping name | Not applicable.                   |

| Regulation                 | Classification                                                              |
|----------------------------|-----------------------------------------------------------------------------|
| Transport hazard class(es) | Not applicable.                                                             |
| Packing group              | Not applicable.                                                             |
| Environmental hazards      | No data available; avoid environmental release.                             |
| Special precautions        | Keep container tightly closed and protected from moisture during transport. |
| Maritime transport in bulk | Not applicable.                                                             |

## SECTION 15: Regulatory Information

|                                        |                                                                                                                                                                                                                            |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>15.1 Safety regulations</b>         | This safety data sheet is prepared according to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 2020/878. Classification and labelling are provided according to Regulation (EC) No 1272/2008 (CLP). |
| <b>REACH registration</b>              | No REACH registration number is available for this product.                                                                                                                                                                |
| <b>Use restriction</b>                 | For laboratory, analytical, educational, and R&D use only where permitted by applicable law. Not for human or animal use.                                                                                                  |
| <b>15.2 Chemical safety assessment</b> | A chemical safety assessment has not been carried out for this product.                                                                                                                                                    |

## SECTION 16: Other Information

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue date</b>                | 01 June 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Revision date</b>             | 01 June 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Version</b>                   | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>SDS number</b>                | ADRIA-SDS-029-SEMAX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Full text of H-statements</b> | H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Abbreviations</b>             | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. CLP: Classification, Labelling and Packaging. EC: European Community. GHS: Globally Harmonized System. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. PBT: Persistent, Bioaccumulative and Toxic. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. SDS: Safety Data Sheet. STOT: Specific Target Organ Toxicity. vPvB: very Persistent and very Bioaccumulative. |
| <b>Information statement</b>     | The information in this safety data sheet is based on the current state of knowledge and is intended to describe the product only for health, safety, and environmental handling purposes. It does not constitute a specification or guarantee of any specific product property. The recipient is responsible for ensuring safe handling and compliance with applicable laws and regulations.                                                                                                                                                                         |