

## CAS Registry Number Information Requirements

Please provide as much of the following information as possible for your substance type (including a unique substance identifier) along with any additional information (including CAS Registry Numbers for starting materials) that may assist us in uniquely identifying your substances. All substance information should be submitted with a completed order form to [answers@cas.org](mailto:answers@cas.org). Orders with complete substance identity information can be processed more efficiently, resulting in lower processing costs.

### Well Defined Chemical Compounds

- Chemical structure diagram (*required*)
- Systematic chemical name or common names
- Molecular formula

### Polymeric Substances

- List of monomers/reactants (*required*)
- Representative structure diagram (*required*)
- Reaction scheme
- Role of reactants (e.g., polymer backbone, initiator, terminator)
- Structural description of the type of polymer (e.g., graft, block, random)

### Complex Reaction Products

- List of reactants (*required*)
- Representative structure or typical composition of the product (*required*)
- Reaction scheme and nature of the reaction

### Plant and Animal Products

- Genus/Genus Species of the source (*required*)
- Method of extraction/chemical processing
- Typical composition of the product

### Products from Industrial Processes

- Precursors and precursor source (e.g., petroleum, coal, waste plastics) (*required*)
- Process description (e.g., catalytic cracking, dewaxed) (*required*)
- Schematic diagram depicting the industrial process and the point where the substance is isolated
- Carbon (alkyl) range (e.g., C4 through C12)
- Principal chemical composition (e.g., alkanes, alkenes, aromatics)
- Physical properties (e.g., boiling range, viscosity, solid, slag)

### Biologics (Biopharmaceuticals)

For protein, DNA, or RNA substances, please provide the following when applicable:

- Sequence data (Word document is preferable).
  - Single-letter code for each amino acid or nucleotide
    - 10 amino acids per group, spaces between groups, 5 groups per line.
    - Positions numbered for last amino acid in each line.
  - For nucleotide sequences:
    - Sequence with spaces between codons and translation (including stop codon) with numbering per line.
- Disulfide Bridge positions

- Indicate if the substance is naturally occurring or synthetic.
- Indicate if the substance is the wildtype full-length molecule or a fragment.
- Biological source (genus species).
- Specific function or activity of the substance
- Modification information (e.g., mutations, glycosylation, etc.)
- If the product is a DNA/RNA construct or fusion protein, provide details on each component used in the construction of the final product including source.
- Trivial Name or Code Designation

For antibodies, please provide the above information **and** the following (when applicable):

- Antibody format (e.g., complete antibody, Fab, scFv, etc.)
- Expression system (cell type, strain, etc.)
- Immunoglobulin class and subclass for heavy and light chains.
- Biological source for humanized or chimeric antibody.
- Antigen and its genus species
- If conjugated to another molecule, provide attachment position of the molecule(s) and the mean number of molecules attached to an antibody.
- Illustration showing domain arrangement and linkage of domains.