What is a CAS Registration Number (CAS RN)?

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CAS RNs are unique numerical identifiers assigned by the Chemical Abstracts Service (Columbus, Ohio, USA), and the CAS Registry covers substances identified from the scientific literature from 1957 to the present and contains more than 67 million organic and inorganic substances. A CAS RN has no inherent meaning, but is assigned in sequential, increasing order when the substance is identified by CAS scientists for inclusion in the CAS registry database.

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How a CAS RN is formed (separated by hyphens and into three parts);

- First consisting of up to four digits
- Second consisting of two digits
- Third consisting of a single digit serving as a check digit

Examples of CAS-RNs:

Caffeine: 58-08-2L-Arginine: 107-95-9

• **H₂0**: 7732-18-5

What types of compounds does the CAS Registry contain?

- Organic and inorganic compounds incl. organometallics, metals, polymers and alloys
- Elements, isotopes & minerals
- Nuclear particles / Proteins and nucleic acids
- Non-structural materials (UVCBs)

Why has the CAS RN become the standard? Since CAS RNs are not dependent upon any system of chemical nomenclature, they can:

• provide a reliable common link between the various nomenclature terms used

to describe substances

• serve as an international resource for chemical substance identifiers used by scientists, industry and regulatory bodies

Why do regulatory agencies rely on CAS RN? Chemical compounds can be described in many different ways:

- molecular formula & structure diagram
- systematic & generic names
- proprietary information, trade or trivial names

How frequently is the CAS Registry database updated? According to the CAS website, approx. 15,000 new substances are added each day.