



**Synonym(s):** Calcium gluconate, USAN. Calglucon. Calcicol

**CAS Registry Number:** 299-28-5

**Extra CAS Registry Numbers(s):** 66905-23-5

**Use/Importance:** Food additive: firming agent, sequestrant, stabiliser

**Biological Use/Importance:** Electrolyte replenisher

**Optical Rotation:**  $[\alpha]_D^{20} +8.5$  (c, 3.0 in H<sub>2</sub>O)

**Other Data:** Component of Calcet

**Hazard & Toxicity:** Human (infant) adverse systemic effects when used therapeutically. LD<sub>50</sub> (mus, ipr) 2200 mg/kg

**Aldrich:** 22764-1

**Fluka:** 21142

**Sigma:** G4625

>>Derivative: Zn(II) salt

**Synonym(s):** Bis(D-gluconato-*O*<sup>1</sup>,*O*<sup>2</sup>)zinc, 9Cl. Zinc(II) gluconate

**CAS Registry Number:** 4468-02-4

**Molecular Formula:** C<sub>12</sub>H<sub>22</sub>O<sub>14</sub>Zn

**Molecular Weight:** 455.687

**Accurate Mass:** 454.030105

**Percentage Composition:** C 31.63%; H 4.87%; O 49.15%; Zn 14.35%

**Biological Use/Importance:** Dietary zinc supplement

**Physical Description:** Powder

>>Derivative: Fe(II) salt

**Synonym(s):** Ferrous gluconate, USAN. Bis(D-gluconato-*O*<sup>1</sup>,*O*<sup>2</sup>)iron. Iron(II) gluconate. Fergon. Ironate. Acroferon. Enteron. Ferrose. Glucoferron. Haemex-G. Neoferron. Many other names

**CAS Registry Number:** 299-29-6

**Extra CAS Registry Numbers(s):** 6047-12-7 12389-15-0 18829-42-0 22830-45-1 25126-39-0 38658-53-6 101197-68-6

**Molecular Formula:** C<sub>12</sub>H<sub>22</sub>FeO<sub>14</sub>

**Molecular Weight:** 446.144

**Accurate Mass:** 446.035899

**Percentage Composition:** C 32.31%; H 4.97%; Fe 12.52%; O 50.21%

**Use/Importance:** Haematinic, corrosion inhibitor, plasticiser, dietary supplement

**Physical Description:** Yellow-grey powder + 2H<sub>2</sub>O

**Solubility:** Sol. H<sub>2</sub>O, insol. EtOH

**Hazard & Toxicity:** LD<sub>50</sub> (rat, orl) 2237 mg/kg

**Fluka:** 44948

>>Derivative: Fe(III)-Na salt

**Synonym(s):** Ferrlecit

**CAS Registry Number:** 34089-81-1

**Biological Use/Importance:** Used for the treatment of iron deficiency

**Development Status:** Approved by FDA (1999)

>>Derivative: Cu(II) salt

**Synonym(s):** Bis(D-gluconato)copper. Copper(II) gluconate

**CAS Registry Number:** 527-09-3

**Extra CAS Registry Numbers(s):** 13005-35-1

**Melting Point:** Mp 155-157°

**Optical Rotation:**  $[\alpha]_D^{26} +15$  (c, 1 in H<sub>2</sub>O)

>>Derivative: Polymer with D-glucitol, Fe(III) salt

**Synonym(s):** Glusoferron, INN

**CAS Registry Number:** 56959-18-3