



**Synonym(s):** 2-Aminopentanediamide, 9Cl. Glutamamide, 8Cl. Glutamide. Glutaminamide

**CAS Registry Number:** 2013-17-4

**Molecular Formula:** C<sub>5</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>

**Molecular Weight:** 145.161

**Accurate Mass:** 145.085127

**Percentage Composition:** C 41.37%; H 7.64%; N 28.95%; O 22.04%

**Melting Point:** Mp 193-196° (as hydrochloride)

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>23</sup> +20.1 (H<sub>2</sub>O)

>>Derivative: Imide

>>Derivative: 5-(4-Hydroxyphenylhydrazide)

**Synonym(s):** Xanthodermin

**CAS Registry Number:** 99280-76-9

**Molecular Formula:** C<sub>11</sub>H<sub>15</sub>N<sub>3</sub>O<sub>4</sub>

**Molecular Weight:** 253.257

**Accurate Mass:** 253.106257

**Percentage Composition:** C 52.17%; H 5.97%; N 16.59%; O 25.27%

**Biological Source:** Isol. from the toxic yellow stainer mushroom (*Agaricus xanthodermus*)

**Melting Point:** Mp 164-166 dec.°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> +5.5 (HCl aq.)

**Solubility:** Sol. MeOH

**UV:** [neutral]  $\lambda_{\max}$  228 ( $\epsilon$  2180); 292 ( $\epsilon$  8300) (MeOH) (Berdy) [base]  $\lambda_{\max}$  242 (); 348 (); 445 () (MeOH-NAOH) (Berdy)

**Other Data:** Related to Agaritine [HKJ38-Y](#) and Anthglutin [CLJ97-T](#)

>>Derivative: *N*-Ac

**CAS Registry Number:** 1188-37-0

**Molecular Formula:** C<sub>7</sub>H<sub>11</sub>NO<sub>5</sub>

**Molecular Weight:** 189.168

**Percentage Composition:** C 44.45%; H 5.86%; N 7.40%; O 42.29%

**Biological Source:** Intermed. in 2,5-Diaminopentanoic acid [BCW90-D](#) biosynth.

**Melting Point:** Mp 199°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -22.7 (H<sub>2</sub>O)

**Aldrich:** 85564-2

**Fluka:** 1160

**Sigma:** A9000

>>Derivative: *N*-Dodecanoyl

**Synonym(s):** *N*-(1-Oxododecyl)glutamic acid. *N*-Lauroylglutamic acid, 8Cl. *N*-Dodecanoylglutamic acid

**CAS Registry Number:** 3397-65-7

**Extra CAS Registry Numbers(s):** 29923-31-7 42926-22-7

**Molecular Formula:** C<sub>17</sub>H<sub>31</sub>NO<sub>5</sub>

**Molecular Weight:** 329.436

**Accurate Mass:** 329.220224

**Percentage Composition:** C 61.98%; H 9.48%; N 4.25%; O 24.28%

**Use/Importance:** Surfactant used in detergents and shampoos, as mono-Na salt

**Physical Description:** V. deliquescent cryst. (EtOH aq.) (Na salt)

**Melting Point:** Mp 95-96° (Na salt)