



## Specification

| Concerning Product:   |  |
|---|--|
| Article number  | 5949291UPEBUL  |
| Trade name / designation / denomination   | Citronensäure Monohydrate, pharma & food   |
| CAS number  | 5949-29-1  |
| Other names / synonyms  | Zitronensäure 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1) Zitronensäure, Monohydrat |
| EC number   | 611-842-9  |
| Customs tariff number / CN code / TARIC   | 29181400   |
| Molecular weight [g / mol]  | 192,12   |
| Formula   | C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>   |
| <b>Danger</b>   |  |
| Causes serious eye damage.<br>IF IN EYES: Call a POISON CENTER or doctor/physician. Remove contact lenses, if present and easy to do. Continue rinsing.<br>Rinse cautiously with water for several minutes. |  |

| Parameter                         | Specification                          | Unit |
|-----------------------------------|--|------|
| <b>Organoleptic test</b>          |  |      |
| Appearance of solution            | complies                               |      |
| Appearance                        | colorless or white, crystalline powder |      |
| <b>Physical parameter</b>         |  |      |
| Loss on drying                    | 7.5 – 8.8                              | %    |
| <b>Identity</b>                   |  |      |
| Assay                             | 99.5 – 100.5                           | %    |
| Identification                    | complies                               |      |
| <b>Impurities</b>                 |  |      |
| Heavy Metals (as Pb)              | ≤ 10                                   | ppm  |
| Oxalate (as anhydros Oxalic Acid) | ≤ 0.01                                 | %    |
| Readily carbonizable substances   | A ≤ 0.52; T ≥ 30                       | %    |

|                              |                        |       |
|------------------------------|------------------------|-------|
| Sulphated ash                | ≤ 0.05                 | %     |
| Sulphates (SO <sub>4</sub> ) | ≤ 0.015                | %     |
| Impurity                     | Tridodecylamine: ≤ 0.1 | ppm   |
| <b>Elemental Impurities</b>  |                        |       |
| Aluminium (Al)               | ≤ 0.2                  | ppm   |
| Arsenic (As)                 | ≤ 1                    | ppm   |
| Calcium (Ca)                 | ≤ 0.02                 | %     |
| Iron (Fe)                    | ≤ 5                    | ppm   |
| Mercury (Hg)                 | ≤ 1                    | ppm   |
| Lead (Pb)                    | ≤ 0.5                  | ppm   |
| <b>Microbiological data</b>  |                        |       |
| Bacterial endotoxins         | ≤ 0.5                  | CFU/g |

**Supplemental information:**

**Released by manufacturer:**  
2017-11-13

**Shelf life:**  
2 years

**Complies with monographie:**  
BP2012, USP35, FCC8, E330

**Regional origin:**  
CN

Chemische Werke Hommel GmbH & Co.KG

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Waltrop, 25. Sep. 2018

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