



**Ciech**  
Soda Deutschland

CIECH Soda Deutschland GmbH & Co. KG \* An der Löderburger Bahn 4a \* 39418 Staßfurt

## Certificate of Analysis

### Contract

### Delivery order

### Delivery date

Document date : 19.11.2021

**Product:** Sodium Bicarbonate, pharmaceutical grade  
Standard granulation (NK)

Batch-No.: 030117114112021  
Production Date: 14.11.2021  
Retest/Expiry Date: 14.11.2023

| <b>Chemical Analysis:</b>               | <b>limit value</b>        | <b>current value</b> |
|-----------------------------------------|---------------------------|----------------------|
| NaHCO <sub>3</sub> content              | %, 99,0 - 101,0           | 100,14               |
| Normal Carbonate                        | %, meets USP requirements |                      |
| loss on drying %:                       | < 0,25 < 0,25             |                      |
| Aspect of solution                      | : clear and colorless     | clear and colorless  |
| water-insoluble substances              | %, meets USP requirements |                      |
| Carbonate pH<br>(5 % solution in water) | : ≤ 8,6                   | 8,4                  |
| Ammonium (NH <sub>4</sub> )             | %, < 0,0020               | < 0,0020             |
| Aluminium (Al)                          | %, < 0,0002               | < 0,0002             |
| Arsenic (As)                            | %, < 0,0002               | < 0,0002             |
| Calcium (Ca)                            | %, < 0,0100               | < 0,0100             |
| Magnesium (Mg)                          | %, < 0,0040               | < 0,0040             |
| Copper (Cu)                             | %, < 0,0001               | < 0,0001             |
| Iron (Fe)                               | %, < 0,0005               | < 0,0005             |
| Heavy metals (Pb)                       | %, < 0,0010               | < 0,0005             |
| Chloride (Cl)                           | %, < 0,0150               | < 0,0150             |
| Sulfur Compounds (SO <sub>4</sub> )     | %, < 0,0150               | < 0,0150             |
| Bulk density (g/ml)                     | : 0,950 - 1,200           | 1,153                |

### Grain Size Distribution:

|              |        |      |
|--------------|--------|------|
| < 0,500 mm/% | : ≥ 95 | 99,9 |
| < 0,315 mm/% | :      | 97,8 |
| < 0,200 mm/% | :      | 85,1 |
| < 0,100 mm/% | :      | 42,2 |

We hereby confirm that the above product complies with the requirements (limits) of the current PH. EUR/ USP/ BP Pharmacopoeia.

# Certificate of Analysis

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Schug

Head of Quality

*This document was created using computer system.*

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