

# PROFESSIONAL SEA SALT QUALITY CHECK



**Produkt / product:** Professional Sea Salt

**Charge / Batch:** 24671

**Konzentration / concentration:**

Lösung aus 39 g/l in Osmosewasser / solution of 39 g/l in osmosis water.

**Methodik / method:**

ICP-OES (induktiv gekoppeltes Plasma mit optischer Emissionsspektrometrie), photometrische und elektrochemische Verfahren spezifisch für Meerwasser / ICP-OES (inductively coupled plasma optical emission spectrometry), photometric and electrochemical methods specific to seawater.

## PHYSIKALISCH-CHEMISCHE GRUNDWERTE / BASIC PHYSICAL-CHEMICAL VALUES

|                          |      | Gemessen<br>/ measured | Toleranzbereich<br>/ tolerance range |
|--------------------------|------|------------------------|--------------------------------------|
| Alkalinität / alkalinity | °dKH | 8,3                    | 8,0 - 8,5                            |
| pH-Wert / pH value       | -    | 8,3                    | 8,0 - 8,4                            |

## MAKROELEMENTE UND HALOGENE / MAJOR ELEMENTS AND HALOGENS in mg/l

|                             |                               | Gemessen<br>/ measured | Toleranzbereich<br>/ tolerance range |
|-----------------------------|-------------------------------|------------------------|--------------------------------------|
| Natrium / sodium            | Na                            | 10832                  | 10300 - 10700                        |
| Schwefel / sulphur          | S                             | 894                    | 880 - 920                            |
| Sulfat / sulphate           | SO <sub>4</sub> <sup>2-</sup> | 2691                   | 2650 - 2750                          |
| Kalium / potassium          | K                             | 420                    | 380 - 400                            |
| Bor / boron                 | B                             | 6,1                    | 5,6 - 6,2                            |
| Magnesium / magnesium       | Mg                            | 1353                   | 1250 - 1340                          |
| Calcium / calcium           | Ca                            | 422                    | 410 - 440                            |
| Strontium / strontium       | Sr                            | 8,5                    | 7,0 - 9,0                            |
| Brom / bromine <sup>1</sup> | Br                            | 77                     | 65 - 75                              |
| Fluorid / fluoride          | F <sup>-</sup>                | 1,3                    | 1,3 - 1,5                            |
| Iod / iodine <sup>2</sup>   | I                             | 0,067                  | 0,060 - 0,080                        |

## MAKRONÄHRSTOFFE / MACRONUTRIENTS in mg/l

|                                    |                                               | Gemessen<br>/ measured | Toleranzbereich<br>/ tolerance range |
|------------------------------------|-----------------------------------------------|------------------------|--------------------------------------|
| Nitrat / nitrate                   | NO <sub>3</sub> <sup>-</sup>                  | 0,3                    | n.n. - 0,3                           |
| Nitrit / nitrite                   | NO <sub>2</sub> <sup>-</sup>                  | 0,010                  | n.n.                                 |
| Phosphor / phosphorus <sup>3</sup> | P                                             | 0,004                  | n.n. - 0,008                         |
| Gesamtphosphat / total phosphate   | PO <sub>4</sub> <sup>3-</sup> <sub>tot.</sub> | 0,012                  | n.n. - 0,025                         |
| Silizium / silicon                 | Si                                            | 0,13                   | 0,10 - 0,20                          |

## RELEVANTE SPURENELEMENTE / RELEVANT TRACE ELEMENTS in µg/l

|                       |    | Gemessen<br>/ measured | Toleranzbereich<br>/ tolerance range               |
|-----------------------|----|------------------------|----------------------------------------------------|
| Zink / zinc           | Zn | 3,0                    | 3 - 5                                              |
| Vanadium / vanadium   | V  | 4,0                    | 2 - 5                                              |
| Kupfer / copper       | Cu | 4,5                    | 2 - 5                                              |
| Nickel / nickel       | Ni | 2,3                    | 2 - 4                                              |
| Molybdän / molybdenum | Mo | 10,3                   | 10 - 16                                            |
| Barium / barium       | Ba | 10,0                   | 10 - 20                                            |
| Cobalt / cobalt       | Co | 0,29                   | n.n. - 2                                           |
| Chrom / chromium      | Cr | 0,16                   | n.n. - 2                                           |
| Eisen / iron          | Fe | > 20                   | Rieselhilfsmittel / anti-caking agent <sup>4</sup> |
| Lithium / lithium     | Li | 192                    | 180 - 220                                          |
| Mangan / manganese    | Mn | > 50                   | Rieselhilfsmittel / anti-caking agent <sup>4</sup> |
| Selen / selenium      | Se | 0,00                   | n.n. - 2                                           |

## SONSTIGE SPURENELEMENTE / OTHER TRACE ELEMENTS in µg/l

|                       |    | Gemessen<br>/ measured | Toleranzbereich<br>/ tolerance range |
|-----------------------|----|------------------------|--------------------------------------|
| Aluminium / aluminium | Al | 0,47                   | n.n. - 2                             |
| Antimon / antimony    | Sb | 0,00                   | n.n.                                 |
| Arsen / arsenic       | As | 0,00                   | n.n.                                 |
| Beryllium / beryllium | Be | 0,00                   | n.n.                                 |
| Blei / lead           | Pb | 0,00                   | n.n.                                 |
| Cadmium / cadmium     | Cd | 0,00                   | n.n.                                 |
| Lanthan / lanthanum   | La | 3,5                    | 2 - 5                                |
| Quecksilber / mercury | Hg | 0,00                   | n.n.                                 |
| Silber / silver       | Ag | 0,00                   | n.n.                                 |
| Titan / titanium      | Ti | 0,00                   | n.n.                                 |
| Wolfram / tungsten    | W  | 0,00                   | n.n.                                 |
| Zinn / tin            | Sn | 0,00                   | n.n.                                 |
| Zirkonium / zirconium | Zr | 0,00                   | n.n.                                 |

### Bemerkungen / notes

1 Gesamtbrom, bestimmt mittels ICP-OES / total bromine, measured using ICP-OES

2 Gesamtjod, bestimmt mittels ICP-OES / total iodine, measured using ICP-OES

3 Gesamtphosphor, bestimmt mittels ICP-OES / total phosphorus, measured using ICP-OES

4 Rieselhilfsmittel haben keine bioaktive Wirkung und werden durch Abschäumer entfernt / anti-caking agents have no bioactive effect and are removed by skimmers.

### Abkürzungen / Abbreviations:

n.n. (nicht nachweisbar) / n.n. (not detectable)