

# SODIUM HYDROGEN CARBONATE

## IUCLID5 FILE EXTRACT, SECTION 1.4

### 1.4 Analytical information

#### Analytical information

**Analytical methods and spectral data** - X-ray diffraction  
- IR spectroscopy  
- Total alkalinity

**Optical activity** The substance is not optically active.

#### Results of analysis

<b>Analysis type</b>	X-ray diffraction
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	X-ray powder diffraction spectroscopy is commonly used to identify crystalline substances by comparing diffraction data against a database maintained by the International Centre for Diffraction Data (ICDD)

<b>Analysis type</b>	IR spectroscopy
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	IR spectroscopy is used to identify a substance by comparing it by a reference spectrum.

<b>Analysis type</b>	Total alkalinity
<b>Tested substance</b>	sodium bicarbonate
<b>Method used</b>	European Pharmacopeia, sodium bicarbonate monograph, 01/2008:0195 corrected 6.0 and US Pharmacopeia USP 32 Official monographs NaHCO <sub>3</sub> , Assay
<b>Remarks</b>	With total alkalinity the bicarbonate content of the substance can be determined.

<b>Analysis type</b>	Ion chromatography
<b>Tested substance</b>	sodium bicarbonate
<b>Method used</b>	ASTM D4327-2003
<b>Remarks</b>	With ion chromatography for example the chloride content in the substance can be determined.

<b>Analysis type</b>	Determination of ammoniacal nitrogen content
<b>Tested substance</b>	sodium bicarbonate
<b>Method used</b>	ISO 3332 - 1975
<b>Remarks</b>	With this analysis the ammonium content of the substance can be determined.

<b>Analysis type</b>	UV/Vis
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	UV/Vis is not relevant to identify or analyse an inorganic substance like sodium bicarbonate because there are no absorption maxima between 200 and 750 nm.

<b>Analysis type</b>	High Pressure Liquid Chromatography
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	High-pressure liquid chromatography is not relevant to identify or analyse an inorganic substance like sodium bicarbonate.

<b>Analysis type</b>	Gas chromatography
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	Gas chromatography is not relevant to identify or analyze an inorganic substance like sodium bicarbonate.

<b>Analysis type</b>	NMR
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	NMR is not relevant to identify or analyse an inorganic substance like sodium carbonate.

<b>Analysis type</b>	Mass spectrometry
<b>Tested substance</b>	sodium bicarbonate
<b>Remarks</b>	Mass spectrometry is not relevant to identify or analyse an inorganic substance like sodium bicarbonate.