

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

Analysis type	X-ray diffraction
Tested substance	sodium bicarbonate
Remarks	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)

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

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

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

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

Analysis type	UV/Vis
Tested substance	sodium bicarbonate
Remarks	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.

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

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

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

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