

SODIUM METABISULPHITE HP

PHYSICO-CHEMICAL CHARACTERISTICS

Formula	: Na ₂ S ₂ O ₅																						
Molecular weight	: 190.12																						
Synonyms	: Sodium bisulphite anhydrous, sodium pyrosulphite, sodium disulphite.																						
Bulk density	: 1.2-1.3 kg/dm ³ approx.																						
Water solubility	: increases with the temperature according to the following table:																						
	<table border="1"> <thead> <tr> <th>t °C</th> <th>10</th> <th>15</th> <th>20</th> <th>25</th> <th>30</th> <th>40</th> <th>50</th> <th>60</th> <th>70</th> <th>80</th> </tr> </thead> <tbody> <tr> <td>g Na₂S₂O₅/100 g soln</td> <td>38.8</td> <td>39.2</td> <td>39.6</td> <td>40.1</td> <td>40.5</td> <td>41.7</td> <td>42.8</td> <td>44.1</td> <td>45.5</td> <td>46.9</td> </tr> </tbody> </table>	t °C	10	15	20	25	30	40	50	60	70	80	g Na ₂ S ₂ O ₅ /100 g soln	38.8	39.2	39.6	40.1	40.5	41.7	42.8	44.1	45.5	46.9
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QUALITATIVE CHARACTERISTICS

Appearance of the product	white crystalline powder
Appearance of the 20% soln	clear and colourless or pale yellow
Assay	% Na ₂ S ₂ O ₅ > 98
	% SO ₂ > 66
Thiosulphate	% S ₂ O ₃ < 0.04
Iron	mg/kg as Fe < 5
Heavy metals	mg/kg as Pb < 10
Selenium	mg/kg as Se < 1
Arsenic	mg/kg as As < 1
Lead	mg/kg as Pb < 2
Mercury	mg/kg as Hg < 1
Antimony	mg/kg as Sb < 1
Cadmium	mg/kg as Cd < 1
Chromium	mg/kg as Cr < 1
Nickel	mg/kg as Ni < 1

The product complies specifications of: Regulation EU 231/2012 (food additives), FCC XII (2020), UNI EN 12121:2013 (chemicals used for treatment of drinking water), ANSI PH4.276 and ISO 3627 (photo standards)

The indicated values are intended as determined according to our standard analysis methods.

STANDARD PACKAGING

25 kg polyethylene bags (on demand with *antistatic treatment*, ATEX directive 1999/92/EC)
Various sizes bulk bags on pallets, shrinkwrapped

STORAGE

Store the product in a dry and cool place because the wet product easily oxidises to sodium sulphate, while heated over 60°C develops SO₂, yielding sodium sulphite.

MAIN USES

In food industry as additive (E223) preservative, antioxidant and antimicrobial for fruits (dried, glazed and candied), vegetables (onions, potatoes, etc.), juices (citrus and grapes) and fish (shrimps and prawns).

In silage treatment as antifermentative.

In starch and sweeteners production as bacteriostatic.

In the photographic industry as component of developer bath.

In desalting plants with reverse osmosis (for removing the excess of chlorine and for membrane preservation) or in drinking water treatment (to remove the excess of chlorine).

In chemical synthesis in the production of acrylic fibres, vitamin K and A, pharmaceutical intermediates, etc.