

## ANNEX I

## E 339 (iii) TRISODIUM PHOSPHATE

<b>Synonyms</b>	Sodium phosphate
	Tribasic sodium phosphate
	Trisodium orthophosphate
<b>Definition</b>	Trisodium phosphate is obtained from aqueous solutions and crystallises in the anhydrous form and with 1/2, 1, 6, 8 or 12 H <sub>2</sub> O. The dodecahydrate always crystallises from aqueous solutions with an excess of sodium hydroxide. It contains 1/4 molecule of NaOH
Chemical name	Trisodium monophosphate
	Trisodium phosphate
	Trisodium orthophosphate
Einecs	231-509-8
Chemical formula	Anhydrous: Na <sub>3</sub> PO <sub>4</sub>
	Hydrated: Na <sub>3</sub> PO <sub>4</sub> · nH <sub>2</sub> O (n = 1/2, 1, 6, 8, or 12)
Molecular weight	163,94 (anhydrous)
Assay	Sodium phosphate anhydrous and the hydrated forms, with the exception of the dodecahydrate, contain not less than 97,0 % of Na <sub>3</sub> PO <sub>4</sub> calculated on the dried basis. Sodium phosphate dodecahydrate contains not less than 92,0 % of Na <sub>3</sub> PO <sub>4</sub> calculated on the ignited basis
P <sub>2</sub> O <sub>5</sub> content	Between 40,5 % and 43,5 % on the anhydrous basis
<b>Description</b>	White odourless crystals, granules or crystalline powder
<b>Identification</b>	
A. Positive tests for sodium and for phosphate	
B. Solubility	Freely soluble in water. Insoluble in ethanol
C. pH of a 1 % solution	Between 11,5 and 12,5
<b>Purity</b>	

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*Status: This is the original version (as it was originally adopted).*

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Loss on ignition	When dried at 120 °C for two hours and then ignited at about 800 °C for 30 minutes, the losses in weight are as follows: anhydrous not more than 2,0 %, monohydrate not more than 11,0 %, dodecahydrate: between 45,0 % and 58,0 %
Water insoluble substances	Not more than 0,2 % on the anhydrous basis
Fluoride	Not more than 10 mg/kg (expressed as fluorine)
Arsenic	Not more than 3 mg/kg
Cadmium	Not more than 1 mg/kg
Lead	Not more than 4 mg/kg
Mercury	Not more than 1 mg/kg