

to make 5 mL, and perform the test with this solution using Apparatus B (not more than 2 ppm).

**Loss on drying** Not more than 0.5% (1 g, 105°C, 2 hours).

**Assay** Weigh accurately about 0.3 g of Sodium Salicylate, previously dried, dissolve in 50 mL of acetic acid (100), and titrate with 0.1 mol/L perchloric acid VS (potentiometric titration). Perform a blank determination, and make any necessary correction.

Each mL of 0.1 mol/L perchloric acid VS  
= 16.010 mg of  $C_7H_5NaO_3$

**Containers and storage** Containers—Tight containers.  
Storage—Light-resistant.

## Sodium Thiosulfate

チオ硫酸ナトリウム

$Na_2S_2O_3 \cdot 5H_2O$ : 248.18

Sodium Thiosulfate, when dried, contains not less than 99.0% of  $Na_2S_2O_3$  (mol. wt.: 158.11).

**Description** Sodium Thiosulfate occurs as colorless crystals or crystalline powder. It is odorless.

It is very soluble in water, and very slightly soluble in ethanol (95), and practically insoluble in diethyl ether.

It effloresces in dry air, and is deliquescent in moist air.

**Identification** A solution of Sodium Thiosulfate (1 in 10) responds to the Qualitative Tests for sodium salt and for thiosulfate.

**pH** Dissolve 1.0 g of Sodium Thiosulfate in 10 mL of water: the pH of the solution is between 6.0 and 8.0.

**Purity (1)** Clarity and color of solution—Dissolve 1.0 g of Sodium Thiosulfate in 10 mL of water: the solution is clear and colorless.

(2) Heavy metals—Dissolve 1.0 g of Sodium Thiosulfate in 10 mL of water, add slowly 5 mL of dilute hydrochloric acid, and evaporate on a water bath to dryness. Add 15 mL of water to the residue, boil gently for 2 minutes, and filter. Heat the filtrate to boil, and add bromine TS to the hot filtrate to produce a clear solution and provide a slight excess of bromine. Boil the solution to expel the bromine. Cool, add 1 drop of phenolphthalein TS, and add dropwise sodium hydroxide TS until a slight red color is produced. Add 2 mL of dilute acetic acid and water to make 50 mL. Perform the test using this solution as the test solution. Prepare the control solution as follows: to 2.0 mL of Standard Lead Solution add 2 mL of dilute acetic acid and water to make 50 mL (not more than 20 ppm).

(3) Calcium—Dissolve 1.0 g of Sodium Thiosulfate in 10 mL of water, add 2 mL of ammonium oxalate TS, and allow to stand for 4 minutes: no turbidity is produced.

(4) Arsenic—To 0.40 g of Sodium Thiosulfate add 3 mL of nitric acid and 5 mL of water, evaporate on a water bath to dryness, and perform the test with the residue. Prepare the test solution according to Method 2, and perform the test using Apparatus B (not more than 5 ppm).

**Loss on drying** 32.0 – 37.0% (1 g, dry first over silica gel for 2 hours in vacuum, and then dry at 105°C for 3 hours).

**Assay** Weigh accurately about 0.4 g of Sodium Thiosulfate, previously dried, dissolve in 30 mL of water, and titrate with 0.05 mol/L iodine VS (indicator: 1 mL of starch TS).

Each mL of 0.05 mol/L iodine VS  
= 15.811 mg of  $Na_2S_2O_3$

**Containers and storage** Containers—Tight containers.

## Sodium Thiosulfate Injection

チオ硫酸ナトリウム注射液

Sodium Thiosulfate Injection is an aqueous solution for injection. It contains not less than 95% and not more than 105% of the labeled amount of sodium thiosulfate ( $Na_2S_2O_3 \cdot 5H_2O$ : 248.18).

**Method of preparation** Prepare as directed under Injections, with Sodium Thiosulfate.

**Description** Sodium Thiosulfate Injection is a clear, colorless liquid.

**Identification** Sodium Thiosulfate Injection responds to the Qualitative Tests for sodium salt and for thiosulfate.

**Pyrogen** Perform the test with Sodium Thiosulfate Injection stored in a container in a volume exceeding 10 mL: it meets the requirements of the Pyrogen Test.

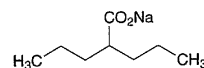
**Assay** Measure exactly a volume of Sodium Thiosulfate Injection, equivalent to about 0.5 g of sodium thiosulfate ( $Na_2S_2O_3 \cdot 5H_2O$ ), add water to make 30 mL, and titrate with 0.05 mol/L iodine VS (indicator: 1 mL of starch TS).

Each mL of 0.05 mol/L iodine VS  
= 24.819 mg of  $Na_2S_2O_3 \cdot 5H_2O$

**Containers and storage** Containers—Hermetic containers.

## Sodium Valproate

バルプロ酸ナトリウム



$C_8H_{15}NaO_2$ : 166.19  
Monosodium 2-propylpentanoate [1069-66-5]

Sodium Valproate, when dried, contains not less than 98.5% of  $C_8H_{15}NaO_2$ .

**Description** Sodium Valproate occurs as a white, crystalline powder. It has a characteristic odor and a slightly bitter taste.

It is very soluble in water, freely soluble in formic acid, in ethanol (95), in ethanol (99.5) and in acetic acid (100), and