

## Certificate of Analysis

**Product Name:** Naproxen sodium

CAS Number: 26159-34-2

IUPAC Name: (2S)-2-(6-Methoxy-2-naphthyl)propanoic acid sodium salt

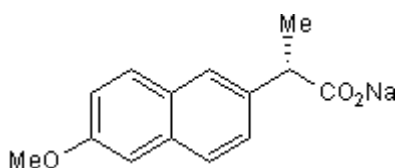
**Catalog No.:** 2655

EC Number: 247-486-2

**Batch No.:** 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>13</sub>NaO<sub>3</sub>  
**Batch Molecular Weight:** 252.24  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows >99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -16.3 (Concentration = 5, Solvent = 0.1N NaOH)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	66.66	5.19	
Found	66.32	5.27	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**Product Name:** Naproxen sodium

CAS Number: 26159-34-2

IUPAC Name: (2S)-2-(6-Methoxy-2-naphthyl)propanoic acid sodium salt

**Catalog No.:** 2655

EC Number: 247-486-2

**Batch No.:** 1

**Description:**

Non-selective cyclooxygenase (COX) inhibitor that displays anti-inflammatory, antipyretic and analgesic effects. Has a neuroprotective role against colchicine-induced cognitive impairment and oxidative stress.

**Physical and Chemical Properties:**

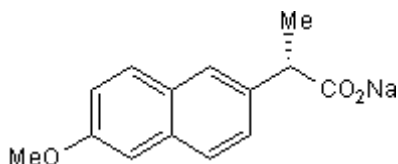
Batch Molecular Formula: C<sub>14</sub>H<sub>13</sub>NaO<sub>3</sub>

Batch Molecular Weight: 252.24

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

**Sutton** (1996) Naproxen sodium. J.Am.Pharm.Assoc. (Wash) **NS36** 633. PMID: 8952250.

**Dhir et al** (2006) Protective effect of naproxen (non-selective COX-inhibitor) or rofecoxib (selective COX-2 inhibitor) on immobilization stress-induced behavioral and biochemical alterations in mice. Eur.J.Pharmacol. **535** 192. PMID: 16522321.

**Kumar et al** (2006) Differential effects of cyclooxygenase inhibitors on intracerebroventricular colchicine-induced dysfunction and oxidative stress in rats. Eur.J.Pharmacol. **551** 58. PMID: 17027965.

**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956