# **PRODUCT** INFORMATION



## Nabumetone

Item No. 20251

CAS Registry No.:	42924-53-8	
Formal Name:	4-(6-methoxy-2-naphthalenyl)-2-butanone	
Synonym:	BRL 14777 0	
MF:	C <sub>15</sub> H <sub>16</sub> O <sub>2</sub>	
FW:		
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 230 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents	the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

#### Laboratory Procedures

Nabumetone is supplied as a crystalline solid. A stock solution may be made by dissolving the nabumetone in the solvent of choice. Nabumetone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of nabumetone in these solvents is approximately 20 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Nabumetone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nabumetone should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Nabumetone has a solubility of approximately 0.09 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Nabumetone is a non-steroidal anti-inflammatory drug (NSAID) and a prodrug form of 6-methoxy naphthalene acetic acid (Item No. 70620).<sup>1</sup> Nabumetone (5-45 mg/kg) reduces carrageenan-induced edema in rats, as well as UV-induced erythema in guinea pigs  $(ED_{50} = 11 \text{ mg/kg})^2$  It reduces phenyl-*p*-quinone-induced writhing in mice  $(ED_{50} = 152 \text{ mg/kg})$ . Nabumetone (50, 100, and 200 mg/kg) reduces endotoxininduced pyresis in rabbits.

#### References

- 1. Cryer, B., and Feldman, M. Cyclooxygenase-1 and cyclooxygenase-2 selectivity of widely used nonsteroidal anti-inflammatory drugs. Am. J. Med. 104(5), 413-421 (1998).
- 2. Boyle, E.A., Freeman, P.C., Mangan, F.R., et al. Nabumetone (BRL 14777, 4-[6-methoxy-2-naphthyl]butan-2-one): A new anti-inflammatory agent. J. Pharm. Pharmacol. 34(9), 562-569 (1982).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

SAFETY DATA This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM