

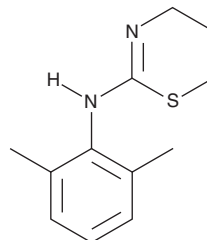
# PRODUCT INFORMATION



## Xylazine

Item No. 14113

**CAS Registry No.:** 7361-61-7  
**Formal Name:** N-(2,6-dimethylphenyl)-5,6-dihydro-4H-1,3-thiazin-2-amine  
**Synonym:** BAY-1470  
**MF:** C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>S  
**FW:** 220.3  
**Purity:** ≥98%  
**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

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

Xylazine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, xylazine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Xylazine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Xylazine is an agonist of  $\alpha_2$ -adrenergic receptors ( $K_i = 194$  nM).<sup>1</sup> It is an analog of clonidine, an  $\alpha_2$ -adrenergic receptor agonist used to reduce blood pressure. Xylazine is used for sedation, anesthesia, and analgesia in non-human mammals.<sup>2,3</sup> This product is also available as an analytical reference standard (Item No. 22641).

### References

1. Virtanen, R., Savola, J.M., Saano, V., *et al.* Characterization of the selectivity, specificity and potency of medetomidine as an  $\alpha_2$ -adrenoceptor agonist. *Eur. J. Pharmacol.* **150(1-2)**, 9-14 (1988).
2. Richardson, C.A. and Flecknell, P.A. Anaesthesia and post-operative analgesia following experimental surgery in laboratory rodents: Are we making progress? *ATLA* **33**, 119-127 (2005).
3. Vallverde, A. Alpha-2 agonists as pain therapy in horses. *Vet. Clin. North Am. Equine Pract.* **26(3)**, 515-532 (2010).

#### WARNING

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

#### 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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