

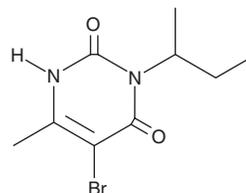
# PRODUCT INFORMATION



## Bromacil

Item No. 24136

**CAS Registry No.:** 314-40-9  
**Formal Name:** 5-bromo-6-methyl-3-(1-methylpropyl)-2,4(1H,3H)-pyrimidinedione  
**Synonym:** (±)-Bromacil  
**MF:** C<sub>9</sub>H<sub>13</sub>BrN<sub>2</sub>O<sub>2</sub>  
**FW:** 261.1  
**Purity:** ≥98%  
**Supplied as:** A 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

Bromacil is supplied as a solid. A stock solution may be made by dissolving the bromacil in the solvent of choice, which should be purged with an inert gas. Bromacil is soluble in DMSO and slightly soluble in methanol.

### Description

Bromacil is a phytotoxic herbicide that inhibits growth of watermelon, molokhia, and wheat plants (EC<sub>50</sub>s = 4.77, 0.08, and 3.08 mg/kg of soil, respectively).<sup>1</sup> It inhibits growth of mustard, pea, sugar beet, linseed, barley, maize, ryegrass, and buckwheat plants by greater than 90% when used at a concentration of 1 kg/hectare.<sup>2</sup> *In vivo*, bromacil induces formation of thyroid tumors in rats and liver tumors in mice.<sup>3</sup> Formulations containing bromacil have been used as herbicides in residential, agricultural, and aquatic settings.

### References

1. El-Nahhal, Y. and Hamdona, N. Phytotoxicity of Alachlor, Bromacil and Diuron as single or mixed herbicides applied to wheat, melon, and molokhia. *Springerplus* **4:367** (2015).
2. Cossey, A.L. and Phillips, J.N. 3-Alkoxyuracil derivatives. 1. Herbicidal activity. *J. Agric. Food Chem.* **29(4)**, 716-718 (1981).
3. Hurley, P.M. Mode of carcinogenic action of pesticides inducing thyroid follicular cell tumors in rodents. *Environ. Health Perspect.* **106(8)**, 437-445 (1998).

#### 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.

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#### CAYMAN CHEMICAL

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