# **PRODUCT** INFORMATION



## **Etretinate**

Item No. 19878

CAS Registry No.:	54350-48-0
Formal Name:	(2E,4E,6E,8E)-9-(4-methoxy-2,3,6-
	trimethylphenyl)-3,7-dimethyl-2,4,6,8- nonatetraenoic acid, ethyl ester
Synonyms:	Ro 10-9359, Tegison
MF:	$C_{23}H_{30}O_3$
FW:	354.5
Purity:	≥98%
UV/Vis.:	λ <sub>max</sub> : 359 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

Etretinate is supplied as a crystalline solid. A stock solution may be made by dissolving the etretinate in the solvent of choice, which should be purged with an inert gas. Etretinate is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of etretinate in these solvents is approximately 1 and 5 mg/ml, respectively.

Etretinate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, etretinate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Etretinate has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Etretinate is a second-generation retinoid previously used systemically to manage psoriasis but withdrawn due to teratogenicity.<sup>1,2</sup> Etretinate alters cAMP signaling, which may be defective in psoriasis.<sup>3,4</sup>

#### References

- 1. Hopkins, R., Bird, H.A., Jones, H., et al. A double-blind controlled trial of etretinate (Tigason) and ibuprofen in psoriatic arthritis. Ann. Rheum. Dis. 44(3), 189-193 (1985).
- Turton, J.A., Williars, G.B., Haselden, J.N., et al. Comparative teratogenicity of nine retinoids in the rat. 2. Int. J. Exp. Path. 73(5), 551-563 (1992).
- 3. Isuka, H., Ohkuma, N., and Ohkawara, A. Effects of retinoids on the cyclic AMP system of pig skin epidermis. J. Invest. Dermatol. 85(4), 324-327 (1985).
- 4. Schopf, R.E., Langendorf, Y., Benz, R.E., et al. A highly decreased binding of cyclic adenosine monophosphate to protein kinase A in erythrocyte membranes is specific for active psoriasis. J. Invest. Dermatol. 119(1), 160-165 (2002).

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

#### SAFFTY 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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