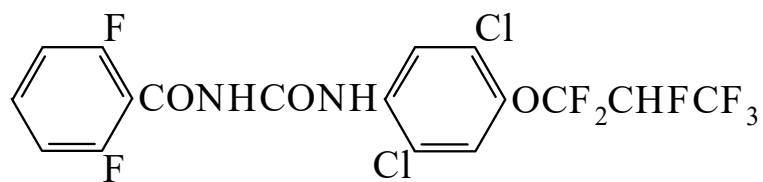




>>Entry Name: Lufenuron, BAN, INN

Synonym(s): *N*-[[[2,5-Dichloro-4-(1,1,2,3,3,3-hexafluoropropoxy)phenyl]amino]carbonyl]-2,6-difluorobenzamide, 9Cl. Program. CGA 184699



CAS Registry Number: 103055-07-8

Related CAS Registry Numbers(s): 103055-14-7 110139-91-8

Molecular Formula: C₁₇H₈Cl₂F₈N₂O₃

Molecular Weight: 511.154

Accurate Mass: 509.978421

Percentage Composition: C 39.95%; H 1.58%; Cl 13.87%; F 29.73%; N 5.48%; O 9.39%

Use/Importance: Insecticide. Used orally for flea infestation of cats and dogs. Chitin synth. inhibitor. Shows high activity against larvae of lepidopterous and coleopterous pests

Calculated Log P Data: Log P 5.84 (calc)

>>Variant: (+)-form

CAS Registry Number: 130841-22-4

Molecular Formula: C₁₇H₈Cl₂F₈N₂O₃

Molecular Weight: 511.154

Accurate Mass: 509.978421

Percentage Composition: C 39.95%; H 1.58%; Cl 13.87%; F 29.73%; N 5.48%; O 9.39%

Physical Description: Cryst. (toluene)

Melting Point: Mp 166°

Optical Rotation: $[\alpha]_{368}^{24} +4$ (c, 2 in CHCl₃)

>>Variant: (–)-form

CAS Registry Number: 130841-26-8

Molecular Formula: C₁₇H₈Cl₂F₈N₂O₃

Molecular Weight: 511.154

Accurate Mass: 509.978421

Percentage Composition: C 39.95%; H 1.58%; Cl 13.87%; F 29.73%; N 5.48%; O 9.39%

Melting Point: Mp 174-175°

Optical Rotation: $[\alpha]_{368}^{24} -3$ (c, 2 in CHCl₃)

References:

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Buholzer, F. *et al.*, *Meded. Fac. Landbouwwet., Rijksuniv. Gent*, 1992, **57**, 781, (*activity*)

MacKichan, J.J. *et al.*, *J. Liq. Chromatogr.*, 1993, **16**, 2595, (*hplc*)

Wilson, E., *Chem. Eng. News*, July 31st, 1995, 16, (*rev*)