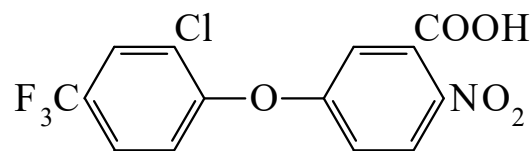




>>Entry Name: Acifluorfen, ANSI, BSI, ISO, WSSA

ENTRY UNDER REVIEW

Synonym(s): 5-[2-Chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoic acid, 9Cl. Tackle 25



CAS Registry Number: 50594-66-6

Molecular Formula: C₁₄H₇ClF₃NO₅

Molecular Weight: 361.661

Accurate Mass: 360.996485

Percentage Composition: C 46.49%; H 1.95%; Cl 9.80%; F 15.76%; N 3.87%; O 22.12%

Use/Importance: Selective pre- and post-emergence herbicide. Used on soybeans and peanuts

Physical Description: Off-white solid

Melting Point: Mp 151.5-157° (140-150°). Mp 240°

Hazard & Toxicity: Skin and eye irritant. LD₅₀ (rat, orl) 2025 mg/kg

>>Derivative: Na salt

Synonym(s): Acifluorfen sodium. Blazer. Scifluorfen. RH 6201

CAS Registry Number: 62476-59-9

Physical Description: Powder

Melting Point: Mp 124-125°

>>Derivative: Me ester

Synonym(s): Acifluorfen methyl

CAS Registry Number: 50594-67-7

Molecular Formula: C₁₅H₉ClF₃NO₅

Molecular Weight: 375.688

Accurate Mass: 375.012135

Percentage Composition: C 47.96%; H 2.41%; Cl 9.44%; F 15.17%; N 3.73%; O 21.29%

Use/Importance: Herbicide

Supelco: R47-4295

>>Derivative: Carboxymethyl ester

Synonym(s): Fluoroglycofen, ANSI, BSI. *O*-[5-(2-Chloro- α,α,α -trifluoro-*p*-tolylxy)-2-nitrobenzoyl]glycolic acid

CAS Registry Number: 77501-60-1

Molecular Formula: C₁₆H₉ClF₃NO₇

Molecular Weight: 419.698

Percentage Composition: C 45.79%; H 2.16%; Cl 8.45%; F 13.58%; N 3.34%; O 26.68%

Use/Importance: Herbicide

>>Derivative: 2-Ethoxy-2-oxoethyl ester

Synonym(s): Fluoroglycofen-ethyl

CAS Registry Number: 77501-90-7

Molecular Formula: C₁₈H₁₃ClF₃NO₇

Molecular Weight: 447.751

Accurate Mass: 447.033265

Percentage Composition: C 48.29%; H 2.93%; Cl 7.92%; F 12.73%; N 3.13%; O 25.01%

Use/Importance: Herbicide. Protoporphyrinogen oxidase inhibitor

Physical Description: Dark amber solid

Melting Point: Mp 65°

Density: d²⁵ 1.01

Hazard & Toxicity: LD₅₀ (rat, orl) 1500 mg/kg