

Toxicological Summary for: Sulfentrazone 3-Carboxylic Acid

CAS: 134391-01-08

Synonyms: None

MDH finds there is insufficient toxicity information available for sulfentrazone 3-carboxylic acid (SC3A) to develop chemical-specific guidance for groundwater. The (SC3A) guidance values will be issued as Risk Assessment Advice (RAA) and will be based on the Health-Based Values (HBVs) of the parent compound, sulfentrazone. This approach is consistent with the approach outlined in the Minnesota Statute 103H.201 Health Risk Limit Rules, Section 4717.7900 Chemical Breakdown Products.

Acute Non-Cancer Risk Assessment Advice ($nRAA_{Acute}$) = 3000 µg/L

Short-term Non-Cancer Risk Assessment Advice ($nRAA_{Short-term}$) = 60 µg/L

Subchronic Non-Cancer Risk Assessment Advice ($nRAA_{Subchronic}$) = 60 µg/L

Chronic Non-Cancer Risk Assessment Advice ($nRAA_{Chronic}$) = 60 µg/L

Cancer Risk Assessment Advice (cRAA) = Not Applicable

Volatile: No

Summary of Guidance Value History:

In 2021, MDH developed a noncancer pesticide rapid assessment of 200 µg/L based on the parent compound, sulfentrazone. In 2025 MDH derived Acute, Short-term, Subchronic, and Chronic Noncancer Risk Assessment Advice (nRAAs) of 3000, 60, 60, and 60 µg/L, respectively, also using sulfentrazone as a surrogate. The Acute, Short-term, Subchronic, and Chronic nRAAs have changed from the 2021 noncancer pesticide rapid assessment value as a result of: 1) using MDH's most recent risk assessment methodology; and 2) incorporation of more toxicological information.

Summary of toxicity testing for health effects identified in the Health Standards Statute

(144.0751):

Even if testing for a specific health effect was not conducted for this chemical, information about that effect might be available from studies conducted for other purposes. MDH has considered the following information in developing health protective guidance.

	Endocrine	Immunotoxicity	Development	Reproductive	Neurotoxicity
Tested for specific	No	No	No	No	No
Effects observed?	_ 1	_ 1	_ 1	_ 1	_ 1

Comments on extent of testing or effects:

¹ Guidance values for SC3A are derived using data from the parent compound, sulfentrazone. SC3A was not tested for endocrine-, immunotoxicity-, developmental-, reproductive-, or neurotoxicity-related effects. For discussion of these effects following exposure to SC3A, please see the [Sulfentrazone Toxicological Summary Sheet](https://www.health.state.mn.us/communities/environment/risk/docs/guidance/gw/sulfentrazone.pdf) (<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/gw/sulfentrazone.pdf>)

Resources Consulted During Review:

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