



Human & Pet Health
Modeling Study

Metofluthrin

Modeling the impact of Metofluthrin on people and pets in realistic scenarios.

In 2022, Thermacell partnered with a 3rd party engineering and scientific consulting firm to apply deposition study results to realistic use case scenarios using models adapted from the European Chemical Agency (ECHA). ECHA serves to protect the European consumer and the environment.



Are Thermacell products okay to use outdoors with children and pets?

“Yes. Using data about the amount of Metofluthrin left behind after the use of our products, we have adapted existing ECHA risk assessment models to assess long-term use across realistic scenarios. Our research has found that Thermacell is suitable for a range of outdoor uses for families including children, infants, and pets. In each scenario tested, **our products demonstrate acceptable use against ECHA risk assessment standards.**”
– Dr. John Hainze, VP of Science & Research at Thermacell

VIEW DATA

THE
ASSESSMENT

Methodology:

Adapted ECHA modeling methodology and deposition study results were used to simulate the effects of short and long-term use of Metofluthrin in real-life scenarios including people and pets.



Family Scenario

Multiple scenarios modeled to assess the risk of Metofluthrin exposure to people and pets.

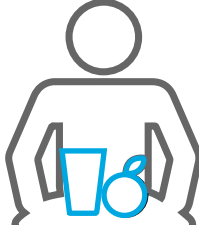
Exposure Assessment Areas:



Contact With
Skin (Dermal)



Breathed In
(Inhalation)

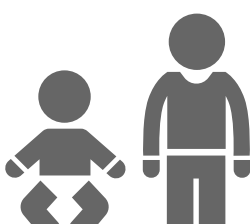


Consumed While
Eating (Ingestion)

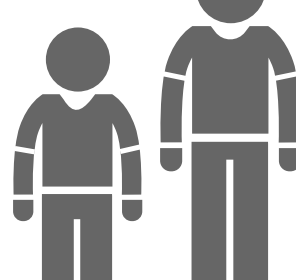
Exposure Assessment Groups:



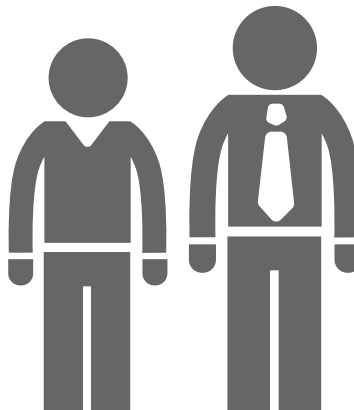
Infants



Toddlers



Children



Adults

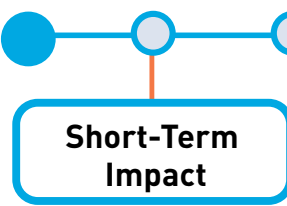


Pets

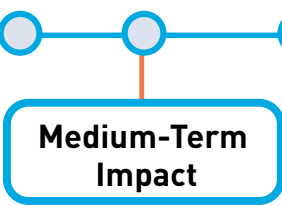
Exposure Assessment Levels:



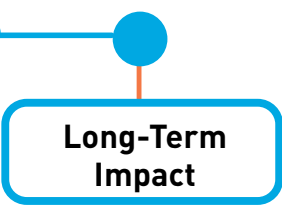
Evaluated repeated use of products in 12-hour intervals to model the effects from short to long-term use.



Short-Term
Impact



Medium-Term
Impact



Long-Term
Impact

THE
RESULTS

Conclusion:

European scientific review based on ECHA risk assessment models with a 3rd party laboratory confirms that Metofluthrin impact is below the threshold for concern for a range of outdoor uses including children, infants, and pets.



Metofluthrin Use Falls Below The Threshold For Concern

For results related to people and pets, the exposure level from our products in use falls **below an acceptable exposure limit derived from ECHA.**

	Pets (Dermal and Inhalation)	Family (Dermal and Inhalation)	Food & Drink (Ingestion)
Area Of Evaluation			
Result	Below No-Effect Exposure Limit		