

# Animal welfare at Evonik

## Animal studies and alternatives



### Introduction

Evonik bears a high level of responsibility for the safety and quality of its products throughout their entire life cycle and for protecting people and the environment. To evaluate the safety of our products, we need toxicological and ecotoxicological data. Until now, animal studies have often been the only way to obtain reliable data on certain issues. In a number of countries, legislation requires animal studies to be carried out to obtain data for chemical substances.

Evonik actively supports the development of alternative methods to animal studies in order to further reduce the number of laboratory animals or avoid them altogether in the future. Evonik acts according to the 3Rs concept<sup>1</sup>:  
Reduce - Refine - Replace.

<sup>1</sup> The 3Rs concept was developed by the English researchers William Russell and Rex Burch in 1959. The background was a humane relationship between humans and animals.

### **Evonik has committed itself to this principle with the following guideline:**

1. As a matter of principle, animal studies are only ever commissioned if they are required by national or international legislation or are absolutely necessary in exceptional cases in order to meet our responsibility to people and the environment.
2. Before commissioning animal studies for necessary ecotoxicological and toxicological assessments, Evonik checks whether published data are already available and uses them wherever possible.
3. All legal and scientifically justifiable options for exposure based waiving are examined and used before commissioning animal studies.
4. Wherever possible, ecotoxicological and toxicological studies are arranged jointly with other manufacturers (e.g. consortia) in order to minimize the number of animal studies.
5. Evonik uses existing data on similar substances to estimate substance properties, for example by "read across" and "grouping".
6. In cases where the use of suitable and recognized alternative test systems is possible, these methods or approaches (e.g. "weight-of-evidence") are applied.
7. Evonik also pursues and supports, among other things, the development of in silico systems (e.g. SAR/QSAR) for predicting toxicological, ecotoxicological and physico-chemical substance properties. Wherever possible, suitable and accepted, the available systems are used.
8. Evonik supports and promotes the development of alternative testing methods by national and international institutions (e.g. EPAA, Stiftung set, Cefic-LRI, ECETOC) both financially and with personnel, and works to ensure that these methods are validated and that the results of these tests are accepted by regulatory authorities.
9. Evonik has a Group-wide Animal Welfare Officer whose tasks include the random assessment of testing projects and the collection of relevant key data on animal studies. In addition, the Animal Welfare Officer maintains a dialog with the Product Stewardship functions to enable an exchange on alternative methods and coordinates audits of the framework contract laboratories working for Evonik.
10. At Evonik, only employees with appropriate scientific training are entrusted with the contracting of animal studies.