

In Vitro Ocular Irritation Assay

Need

Assessing the risk of eye injury is a primary consideration in determining the safety of ophthalmologic drugs or cosmetics. It is also of concern in the case of accidental exposures to chemicals, formulations, and other products. Early ocular testing is important because:

- Early assessment can determine a product's relative risk for causing eye irritation and/or serious eye damage.
- Initial testing may identify chemicals or mixtures with a low potential for eye injury and obviate the need for further *in vitro* or *in vivo* testing.

Solution

LifeNet Health offers chemical testing services with the validated EpiOcular™ Eye Irritation Test (EIT) for the assessment of potential ocular irritation and/or serious eye damage of client's test articles, operating in full compliance with the OECD 492 guideline. The health of the corneal tissue is assessed by measuring tissue viability immediately following exposure and a post-treatment incubation period.



Accurate & reliable data



Fast turnaround times



OECD method-based studies



Collaborative approach

Testing Parameters

ASSAY PARAMETERS	PROTOCOL
Model	MatTek EpiOcular™ (OCL-200)
Replicates	3
Test Article Formulation	Liquid/Solid (tested neat or as provided)
Negative Control	Sterile deionized water
Positive Control	Methyl Acetate (applied neat)
Exposure Time	30 minutes (liquid test articles) and/or 6 hours (solid test articles)
Post Exposure Soak	12 minutes (liquid test articles) and/or 25 minutes (solid test articles)
Post Exposure Recovery	2 hours (liquid test articles) and/or 18 hours (solid test articles)
Viability Assessment	MTT
Time to Complete	2-3 weeks from initiation
Regulatory	Non-GLP or GLP
Deliverables	Full Report including Tissue Viability, UN GHS classification (if possible)

TISSUE VIABILITY (% NEGATIVE CONTROL)	UN GHS CATEGORIZATION
≤ 60%	No prediction can be made (UN GHS Category 2 or Category 1)
> 60%	Non-Irritant (UN GHS No Category)

Irritancy categorization based on tissue viability after exposures and post-exposure recovery.