# Skin corrosion protocol
# Episkin (validated)

Model: EpiSkin™ Small Model

## DESCRIPTION

Culture insert equilibration period: incubate for a 1 h up to 48 h (37°C)

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Transfer tissues to fresh maintenance medium

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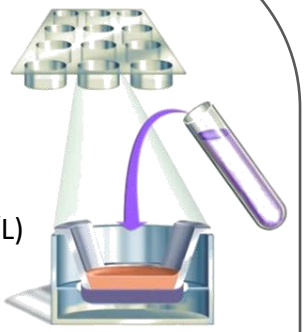
Treatment on 3 tissue replicates per condition:
- ○ Liquids and viscous: 50 µL ± 3 µL (131.6 µL/cm²)
- ○ Solids: 20 ± 2 mg (52.6 mg/cm²) + 100 µL ± 5 µL NaCl solution (9 g/L)
- ○ Waxy/sticky: 50 ± 2 mg (131.6 mg/cm²) with a nylon mesh



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Treatment Period: Incubate for 3min, 60min (± 5min) and 240min (± 10min) at RT

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Rinse with 25 mL PBS+

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Incubate tissues in 0.3 mg/mL MTT solution for 3h

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Make a biopsy of the epidermis

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Extraction: Immerse the tissue in 500 µL acidified isopropanol

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Extract formazan overnight at RT

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Read OD with microplate spectrophotometer at 570 nm

## PREDICTION MODEL

| *In vitro* Result | Classification (*In vivo* Prediction) |
|---|---|
| Mean tissue viability < 35% after 3 min exposure | ***Corrosive:*** *Optional Sub-category 1A* |
| Mean tissue viability<br>*≥ 35% after 3min exposure* ***AND*** *< 35% after 60min exposure*<br>***OR***<br>*Mean tissue viability*<br>*≥ 35% after 60min exposure* ***AND*** *< 35% after 240min exposure* | ***Corrosive:***<br>*A combination of optional Sub-categories 1B-and-1C* |
| *Mean tissue viability*<br>*≥ 35% after 240min exposure* | *Non-corrosive* |

EPISKIN