

Explanation of SAR results for Skin/Eye Irritation/Corrosion

The predictions of Skin/Eye Irritation/Corrosion are based on the combination of Exclusion and Inclusion rules.

- I. Skin predictions are based on a combination of Skin Exclusion and Inclusion rules
  1. **Skin Exclusion rules profiler** consists of 35 categories for which the SAR result should be:
    - Not Irritating or Corrosive to skin – for 16 categories
    - Not Corrosive to skin – for 19 categories
  2. **Skin Inclusion rules profiler** consists of 40 categories for which the SAR result should be:
    - Irritating or Corrosive to skin – for 29 categories
    - Irritating to skin – for 11 categories
  
- II. Eye predictions are based on a combination of Eye Exclusion and Inclusion rules
  1. **Eye Exclusion rules profiler** consists of 31 categories for which the SAR result should be:
    - Not Irritating or Corrosive to eye – for 11 categories
    - Not Corrosive to eye – for 5 categories
    - Not Corrosive to skin\* – for 15 categories (this result is not consistent with the profiler! - explained in Table1)
  2. **Eye Inclusion rules profiler** consists of 17 categories for the SAR result should be:
    - Irritating or Corrosive to Eye – for 17 categories

Combinations of these results (shown above) with addition of the profiling results “Exclusion/Inclusion not met” and “Undefined”, give the Final SAR predictions for Skin/Eye I/C - illustrated in Table 1.

Table 1. Combinations of Exclusion and Inclusion rules giving the final SAR prediction in Toolbox

	Combinations of Exclusion and Inclusion results		Final SAR Result	Extrapolation step**
	Exclusion Rules	Inclusion Rules		
Skin	Not Irritating or Corrosive to skin	Inclusion rules for Irritation	Not Irritating or Corrosive to skin	
		Inclusion rules for Irritation/Corrosion		
		Inclusion rules Not met		

	Not Corrosive to skin	Inclusion rules for Irritation	Irritating to skin	
		Inclusion rules for Irritation/Corrosion	Not Corrosive to skin	
		Inclusion rules Not met		
	Exclusion rules not met	Inclusion rules for Irritation	Irritating to skin	
		Inclusion rules for Irritation Corrosion	Irritating or Corrosive to skin	Extrapolation step based on Inclusion rules for Skin Irritation Corrosion is defined
		Inclusion rules not met	Unknown	
	Undefined	Inclusion rules for Irritation	Irritating to skin	
		Inclusion rules for Irritation Corrosion	Irritating or Corrosive to skin	Extrapolation step based on Inclusion rules for Skin Irritation Corrosion is defined
		Inclusion rules not met	Undefined	
Eye	Not Irritating or Corrosive to Eye	Any of the Inclusion rules	Not Irritating or Corrosive to eye	
		Inclusion rules Not met		
	Not Corrosive to eye	Any of the Inclusion rules	Not Corrosive to eye	
		Inclusion rules Not met		
	Exclusion rules not met	Any of the Inclusion rules	Irritating or Corrosive to eye	
		Inclusion rules not met	Unknown	The extrapolation step is applied
	Undefined	Any of the Inclusion rules	Irritating or Corrosive to eye	
		Inclusion rules not met	Undefined	The extrapolation step is applied
	Not Corrosive to skin*	Any of the Inclusion rules	Unknown	
		Inclusion rules not met		

Legend:

\* In the original table for Eye I/C Exclusion Rules there is such a result. In case such a category is assigned after profiling with the **Eye Exclusion Rules profiler** combined with any of the Eye Inclusion rules or Inclusion rules not met, the final SAR prediction in Toolbox is “Unknown”, since these are exclusion rules for Skin Corrosion

\*\* The extrapolation step (looking for skin irritation/corrosion inclusion rules) is applied in Toolbox in case no inclusion alerts for eye irritation is found, i.e. only when the profiling result for Eye I/C is: *“Exclusion rules not met”/“Undefined”* + *“Inclusion rules not met”* the extrapolation step is fulfilled