



## REAGENTS AND SOLVENTS RISK ANALYSIS

### Optimize the management within laboratories

This service provides a twofold benefit: on one side, managing and optimizing the shelf life of reagents and solvents to ensure their quality; on the other, it ensures risk-based optimization inventories and materials reorders. This service is based upon a methodological approach that highlights the most critical substances and an action plan to optimize their management, through a defined and shared acceptability criteria matrix. This

provides a rationale repeatable for new future references to be introduced in the lab.

#### Also applicable to:

- Countersamples management;
- New substances evaluation according to acceptability matrix established;
- Continuous evaluation updating.



# RISK EVALUATION MATRIX and Mitigation Actions

SOLVENT/ REAGENT	EXPOSURE FACTOR			
	EF1	EF2	EF3	EF4
S3	Green	Yellow	Red	Red
S2	Green	Green	Yellow	Red
S1	Green	Green	Green	Green

The calculated risk index for each substance is compared with the acceptability matrix in order to identify substances for which a **mitigation action** is suggested. The assessment will also confirm good management in cases of substances identified as non-critical.

Here's some mitigation actions:

- Reduce container size
- Reduction of the shelf life of the substance
- Evaluation of alternative packaging

< *Acceptability and unacceptability of reagents and solvents are related to the storage time of open container*

## OUR METHODOLOGICAL APPROACH



Definition of acceptability criteria and construction of the matrix

Evaluation of the Stability Steps of Substances

Estimation of environmental conditions factor based on frequency of use, container size and turn over

Identification of the most critical substances on the basis of defined acceptance criteria and consequent definition of mitigation actions