



## ❓ How to fill in the excel template for chemical recommendations ?

### 1. Single chemicals

- *Type column* : click on the adequate cell and select “Single”. Please do not write manually “single”. Indeed, “Single” needs to be written with a capital letter so that the program would recognize this chemical compound and take it into account in the chemical report.

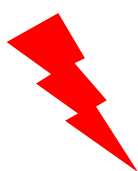
Type	CAS	Chemical Name	Concentration	Aggregation
Single				
Mix				
Component for mixture				

- *CAS column* : enter the CAS number of the chemical  
CAS Numbers (Chemical Abstracts Service) are unique numerical identifiers for chemical compounds, polymers, biological sequences, mixtures and alloys. A CAS registry number is separated by hyphens into three parts, the first consisting of up to 7 digits, the second always consisting of two digits, and the third consisting of a single digit serving as a check digit :

XXXXXXX-YY-Z  
 [up to 7 digits-always 2 digits-always 1 digit]

Example, for nitric acid : 7697-37-2

- *Chemical name* : enter the chemical name of the compound
- *Concentration column* : enter the concentration of the chemical.



- Please do not fill in the following signs in this column : “%” “,” “.” Indeed, only whole numbers (integers) are allowed.
- Example for the value of the concentration :  
The MSDS states : “Nitric acid, concentration 25-30%”

Always take the higher concentration that is stated, so that the worst-case scenario could be considered in the chemical assessment  
→ take “30%” for the previous example



- **Aggregation column** : fill in the aggregation state (e.g. liquid, solid, gas or unknown) of the chemical. As for the "Type" column, select the appropriate word :

Type	CAS	Chemical Name	Concentration	Aggregation
Single	7697-37-2	Nitric acid	30	Solid Liquid Gas Unknown

## 2. Chemical mixtures

To enter a request for a chemical mixture, you would need several information from the MSDS of this compound :

- **Name of the mixture** (see section 1 of the MSDS)
- **Physical state of the mixture** (see section 9 of the MSDS)  
Example : liquid, gas, solid

### 9. Physical and chemical properties

#### General information

Physical state : liquid  
 Colour : yellow  
 Odour : ester-like, mild

#### Important health, safety and environmental information

pH-Value : not applicable  
 Changes in the physical state  
 Melting point : -4 - +8 °C  
 Boiling point : 40 - 80 °C DIN 53 171

- **Composition of the mixture** (see sections 2 or 3 of the MSDS)

HAZARDOUS INGREDIENTS OF MATERIALS				
Chemical names	Ingredients	%	TLV Units	CAS No.
	Nitric acid	2-10	2 ppm	7697-37-2
	Ethanol	85-90	1000 ppm	64-17-5
	Methanol	10-15	200 ppm (skin)	67-56-1
	Ethyl acetate	<1	(TWA) 400 ppm	141-78-6
PHYSICAL DATA				
Proportions	Physical State: Liquid			



To enter those information in the template :

- First line = general information about the mixture

➤ Select for the first line “Mix” in the “Type” Column

Type	CAS	Chemical Name	Concentration	Aggregation
Single				
Mix				
Component for mixture				

➤ Enter the name of the chemical mixture

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		

➤ Select the aggregation state of the whole mixture (gas, liquid or solid) by clicking on the appropriate box

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		Liquid

➤ You can leave the “CAS” and “Concentration” columns blank for this line

- Following lines = composition of the mixture

➤ For each compound present in the mixture, select “Component for Mixture” in the “Type” Column

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		Liquid
Single				
Mix				
Component for mixture				

➤ Enter the CAS and chemical name of the component

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		Liquid
Component for mixture	7697-37-2	Nitric acid		



- In the “Concentration” column, enter for each component the highest proportion stated in the MSDS.

Example : see MSDS in page 2 of this FAQ

The first component stated is nitric acid, 2-10% → Pick 10%

- Enter the aggregation state of this compound.

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		Liquid
Component for mixture	7697-37-2	Nitric acid	10	Liquid

- Do the same thing for each of the components of the mixture

Type	CAS	Chemical Name	Concentration	Aggregation
Mix		Name of the mixture		Liquid
Component for mixture	7697-37-2	Nitric acid	10	Liquid
Component for mixture	64-17-5	Ethanol	90	Liquid
Component for mixture	67-56-1	Methanol	15	Liquid
Component for mixture	141-78-6	Ethyl acetate	1	Liquid



Please be aware that the template must contain a continuous list of mixtures and of single chemicals. No blank lines must appear between the different compounds.

## INCORRECT

Type	CAS	Chemical Name	Concentration	Aggregation
Single	67-56-1	Methanol	100	Liquid
Mix		170.000 Renia - Ortec - Contact Adhesive		Liquid
Component for mixture	141-78-6	Ethyl acetate	35	Liquid
Component for mixture	68476-50-6	Hydrocarbons	30	Liquid
Component for mixture	110-82-7	Cyclohexane	30	Liquid

## CORRECT

Type	CAS	Chemical Name	Concentration	Aggregation
Single	67-56-1	Methanol	100	
Mix		170.000 Renia - Ortec - Contact Adhesive		Liquid
Component for mixture	141-78-6	Ethyl acetate	35	Liquid
Component for mixture	68476-50-6	Hydrocarbons	30	Liquid
Component for mixture	110-82-7	Cyclohexane	30	Liquid