

**Fact-sheet - How to store the chemicals? Part II**



**What is the objective?**

Why the factory should follow specific requirements for a proper and safe storage of chemicals?

- To prevent and mitigate the risk of incidents (chemical spill, incompatible chemicals reactions, fire, etc.);
- To reduce and control the workers exposure to chemical hazards (vapors, fumes, toxic dust, etc.);
- To keep the chemicals in good conditions and avoid a waste or deterioration of chemicals.

To store the chemicals in safe conditions, this second fact-sheet will focus on the requirement:

**Segregation of incompatible chemicals**



**How to achieve this objective?**

**Step 1: Identify the hazard classification** of each chemical because chemicals must be segregated according to their hazard class (flammable, toxic, oxidizing, etc.). The hazard symbols must be visible on every hazardous chemical container (see fact-sheet “chemical label”) in order to facilitate the identification.

**Step 2: Segregate incompatible chemicals** using a compatibility chart (see example on the right) and referring to the SDS section 10 - Stability and reactivity.

The degree of segregation will depend upon the risk: the more the risk is important the more drastic measures such as “isolation” would be recommended. The use of a physical boundary or the use of distance are alternatives and when the risk is lower, provision of separate secondary containments can be sufficient. See fact sheet “How to store chemicals? Part III”.

		C	Xi, Xn	T, T+	F, F+	O	E
C		✓	✓	○	✗	✗	✗
Xi Xn		✓	✓	✓	✓	○	✗
T, T+		○	✓	✓	○	✗	✗
F, F+		✗	✓	○	✓	✗	✗
O		✗	○	✗	✗	✓	✗
E		✗	✗	✗	✗	✗	✓

C	corrosive
Xi	irritant
Xn	harmful
T, T+	toxic, highly toxic
F, F+	flammable, highly flammable
O	oxidizing
E	explosive

✓	Are allowed to be stored together
○	Are allowed to be stored together, subject to special precautions
✗	Are not allowed to be stored together



- Write an internal procedure about how to segregate chemicals on-site;
- Appoint a manager to control regularly if the chemicals are stored and separated as per the internal procedure.



**Common non-compliances**

**Containers have no label**

Without label, the content of the chemical container cannot be verified and therefore the compatibility cannot be checked:



**Drainage system along incompatible chemicals**

Physical boundaries were provided in this store to separate the incompatible chemicals but there is no dedicated secondary containment for each container and a drainage line connecting the different sections so in case of leaks/spills, incompatible chemicals might be in contact. See fact sheet “How to store chemicals? Part III”.

