

*This paper provides general information on how to better understand the Aspiration hazard class.*

The hazard statement H304 “May be fatal if swallowed and enters airways”, is assigned to the Aspiration hazard, category 1.

**Hence grouping it into another hazard class like “acute toxicity” is wrong and, if done, misleading.<sup>1</sup>**

| Code        | Hazard Statement                                      | Hazard Class                      | Category   |
|-------------|---|-----------------------------------|--|
| <b>H304</b> | <b>May be fatal if swallowed and enters airways</b>   | <b>Aspiration hazard</b>          | <b>Category 1</b>                                  |
| <i>H305</i> | <i>May be harmful if swallowed and enters airways</i> | <i>Aspiration hazard</i>          | <i>Category 2<br/>(additional category in GHS)</i> |
| <b>H330</b> | Fatal if inhaled                                      | Acute toxicity, inhalation        | Category 1, 2                                      |
| <b>H331</b> | Toxic if inhaled                                      | Acute toxicity, inhalation        | Category 3   |
| <b>H332</b> | Harmful if inhaled                                    | Acute toxicity, inhalation        | Category 4   |
| <i>H333</i> | <i>May be harmful if inhaled</i>                      | <i>Acute toxicity, inhalation</i> | <i>Category 5<br/>(additional category in GHS)</i> |

**The classification criteria for the aspiration hazard are not directly linked to any real health hazard but are related to the viscosity which is a physico-chemical property of substances.** It is due to their low viscosity that e.g. hydrocarbon solvents are classified for aspiration hazard.

In other words, the aspiration hazard, induced following an accidental ingestion, is linked **to the viscosity endpoint** (< 20.5 cSt at 40 °C). This risk may arise in case of ingestion and/or vomiting after ingestion when the liquid goes straight to the airways and the lungs.

This risk associated with the aspiration hazard classification has been evaluated under REACH for all the hydrocarbon solvents resulting in **no risk** including to workers and end users when the identified the risk management measures (RMM) are implemented: *Do not ingest. If swallowed, seek immediate medical assistance.* **Hence, substances with a H304 hazard statement can be used safely when the risk management measures are respected.**

Additionally, the outcome of **tests for acute toxicity by inhalation shows no need for any hazard classification for hydrocarbon solvents** (except for the mono-constituent substance isohexadecane which is toxic by inhalation cat 4).<sup>2</sup>

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<sup>1</sup> This is currently applied rather systematically under EU ecolabels and should hence be revisited.

<sup>2</sup> Aspiration is generated by the entry of a liquid or solid substance or mixture directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system. It can happen if the substance in its liquid phase is swallowed or aspired directly. Inhalation as comparison to exposure to vapours, aerosol, dusts and mists.

