United Nations ST/SG/AC.10/C.4/2020/3

Secretariat

Distr.: General
2 April 2020
English
Original: English and French

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Thirty-ninth session
Geneva, 8-10 July 2020
Item 2 (i) of the provisional agenda
Classification criteria and related hazard communication: other issues

Review of the decision logics

Note by the secretariat*

Introduction

1. At its thirty-eighth session, the Sub-Committee considered the information provided by the secretariat in document ST/SG/AC.10/C.4/2019/9 on the issues encountered with the current decision logics and noted that it was necessary to convert them into a format compatible with the most recent version of the text processing software in use and that this would lead to changes in the current design. A delegation requested that the revised decision logics be submitted in an official document for the next session. The proposal in this document takes account of that request.

2. The proposal in paragraph 3 also takes account of the following editorial changes and corrections:

- Decision logic 2.2: The correction does not apply to the English version.
- Decision logic 2.3.1 c): The correction does not apply to the English version.
- Decision logic 2.9:
  - Amend the end of the question in the second text box from the top to read as follows: "…or silica gel and exposed to air?".
  - Amend the end of the question in the third text box from the top to read as follows: "…within 5 min, on contact with air?".

  Justification: Alignment with the criteria in table 2.9.1.
- Decision logic 2.14: Delete the answer "Yes" in the arrow coming from the first text box on top of the decision logic.

* 2020 (A/74/6 (Sect.20) and Supplementary, Subprogramme 2.

Justification: The sentence "The substance/mixture is a solid" is not a question but a statement. No answer is required.

- Decision logic 2.16: The correction does not apply to the English version.
- Decision logic 2.17:
    - Delete the question mark on the first text box on top of the decision logic.

      Justification: Alignment with similar statements in other decision logics.

    - Merge the content of the text boxes "Test 6 (a), 6 (b)" and "Is the result a mass explosion" and "burning rate test (Part V, sub-section 51.4)" and "Is the result a mass explosion?" into two text boxes with the following content: "Test 6 (a), 6 (b): Is the result a mass explosion?" and "Burning rate test (Part V, sub-section 51.4): Is the result a mass explosion?".

      Justification: Simplification of the decision logic.
- Decision logic 3.3.2: In the first text box on top of the decision logic replace "**Substance**" with "**Mixture**"

  Justification: The decision logic only applies to mixtures.
- Decision logic 3.9.2: In the text boxes, delete "of this Chapter" (three times)

  Justification: Unnecessary specification.
- Decision logic 3.10.1:
    - In the third text box from the top delete "**Mixture**"

      Justification: Redundant information.

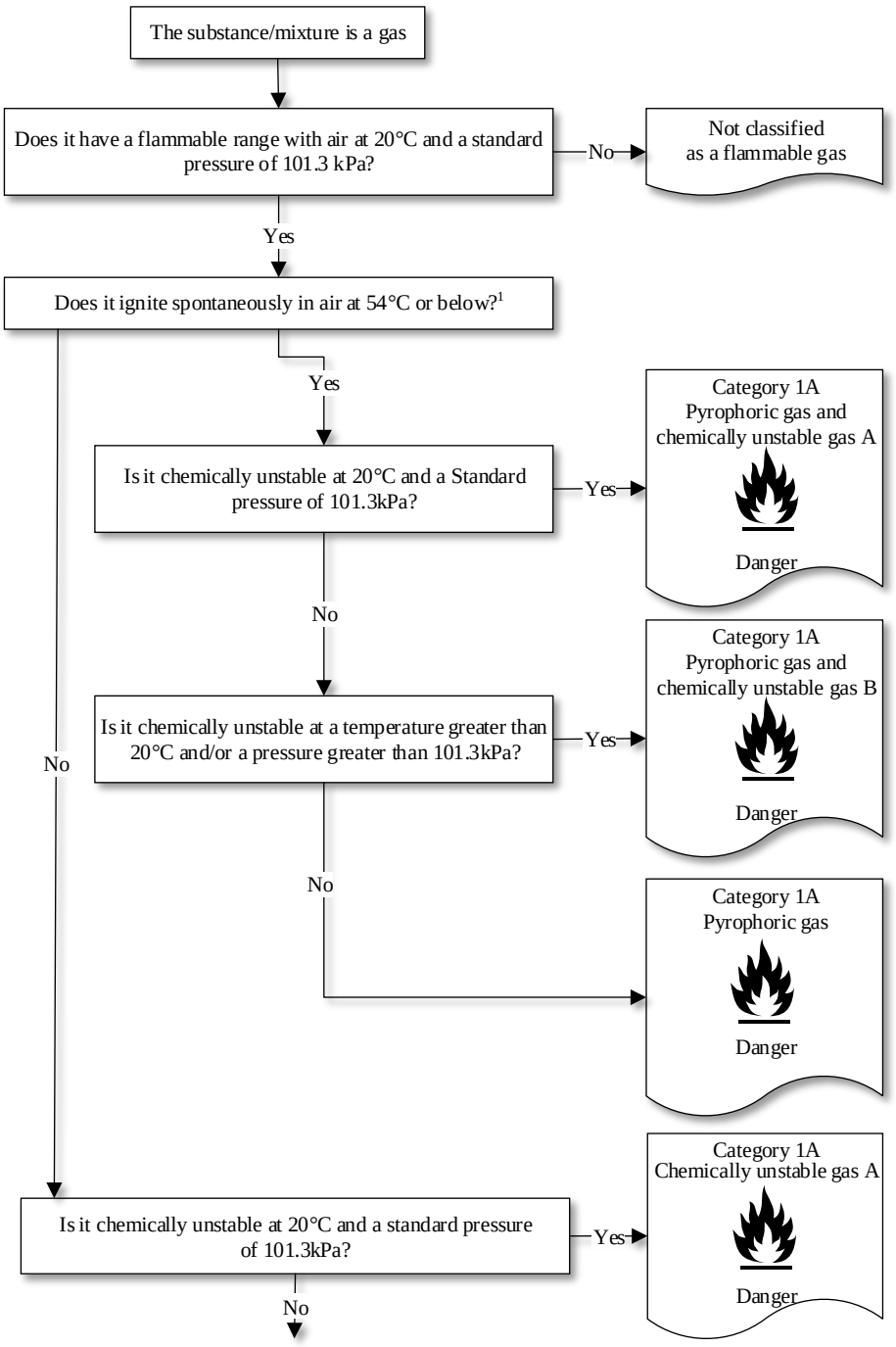
    - The corrections to the text boxes on the right-hand side of the decision logic (e.g. those applicable for categories 1 and 2 etc) are not applicable to the English version.
- Decision logic 4.1.1:
    - Replace "Values for mixtures/decision logic 4.1.2" with "Values for mixtures from decision logic 4.1.2".

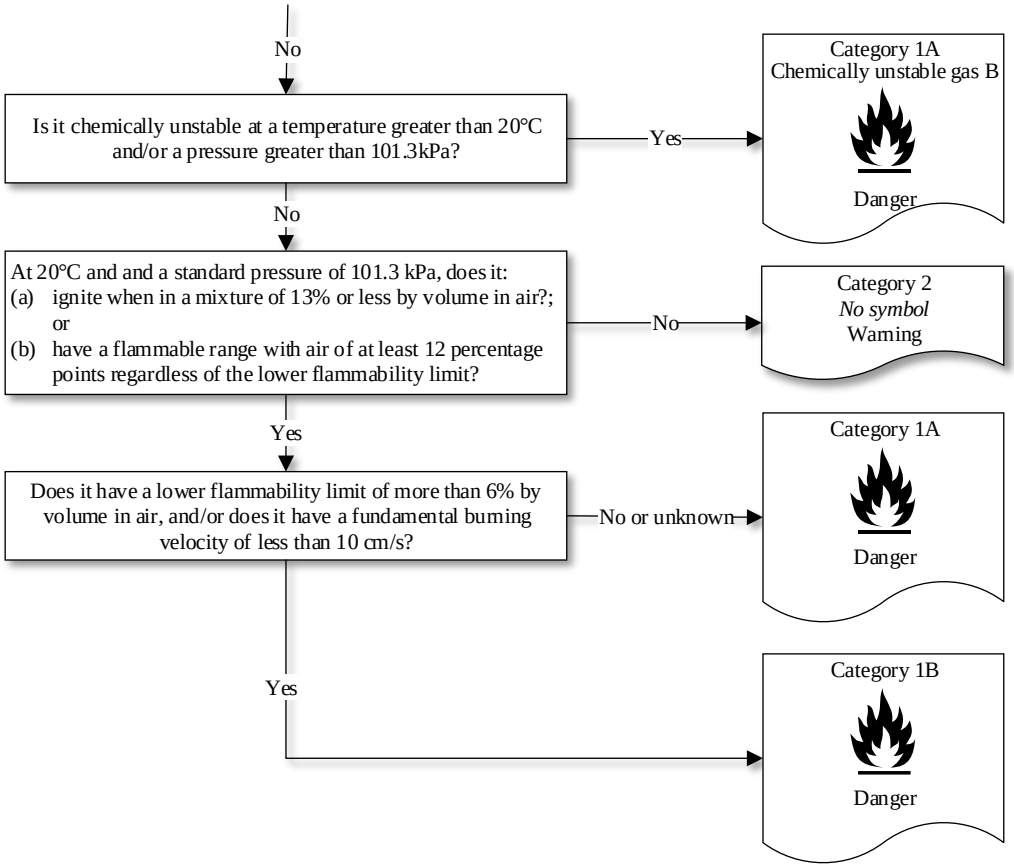
Proposal

3. Replace the decision logics in parts 2 (except those in chapters 2.8 and 2.15), 3 and 4 of the GHS with the following:

Chapter 2.2: Flammable gases

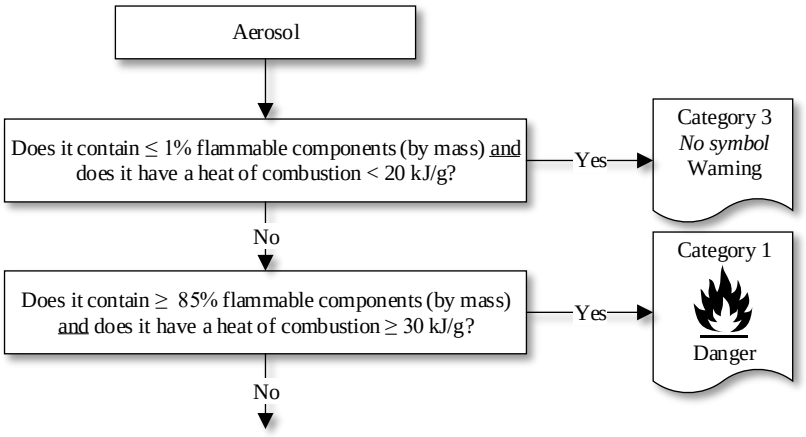
Decision logic 2.2





Chapter 2.3: Aerosols and chemicals under pressure

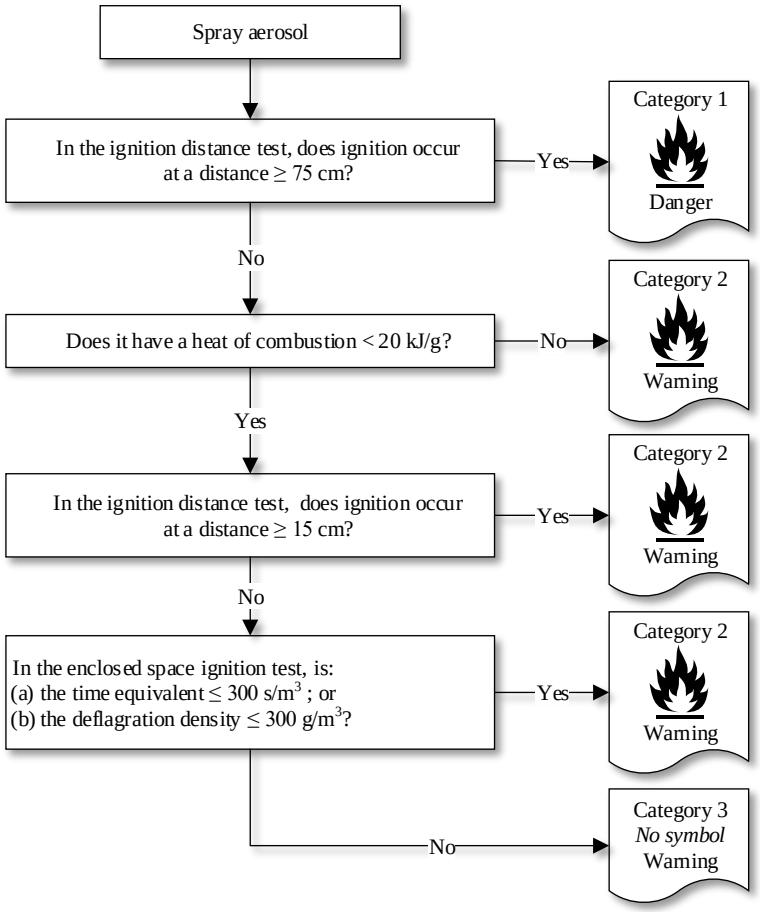
Decision logic 2.3.1 (a) for aerosols



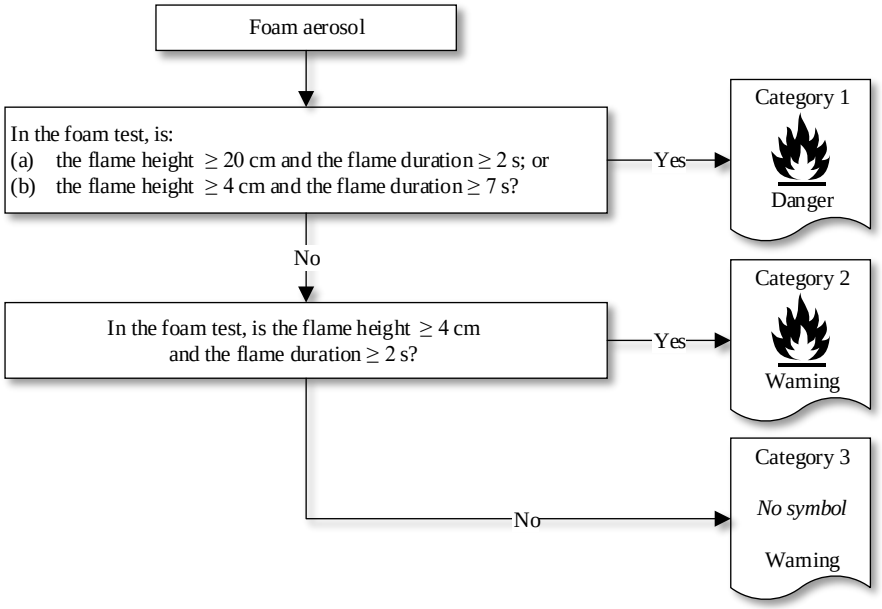
For spray aerosols, go to decision logic 2.3.1 (b)

For foam aerosols, go to decision logic 2.3.1 (c)

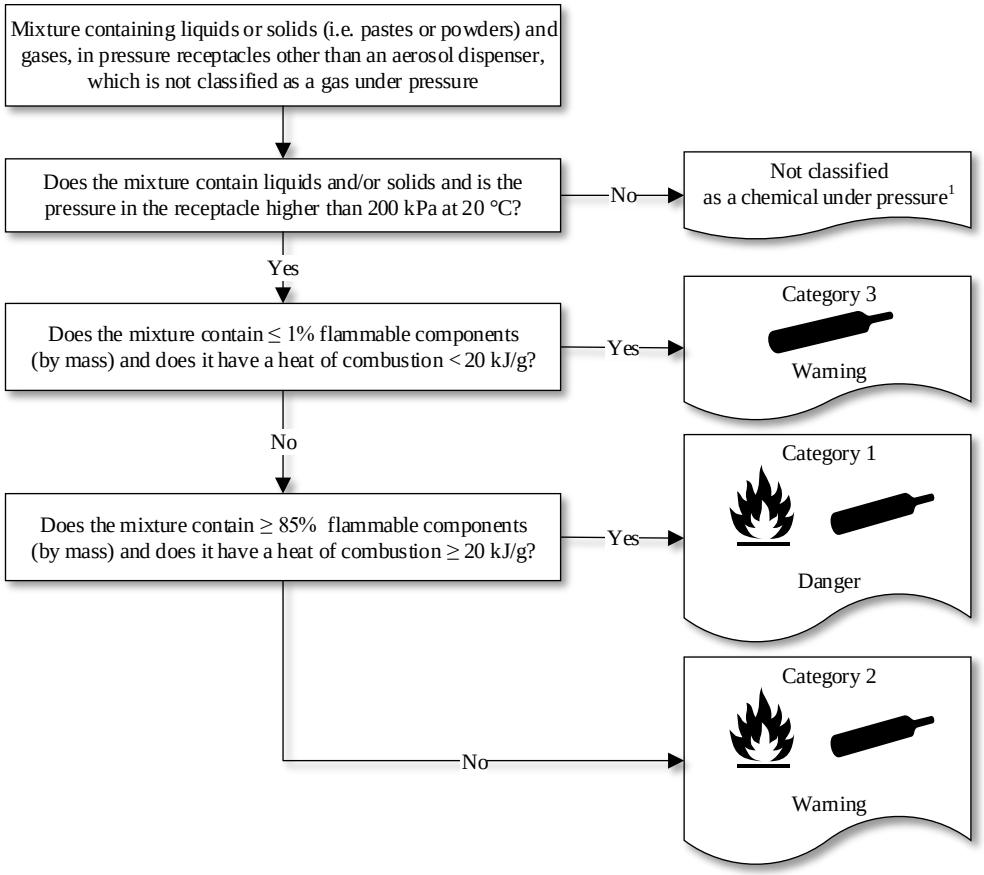
Decision logic 2.3.1 (b) for spray aerosols



Decision logic 2.3.1 (c) for foam aerosols

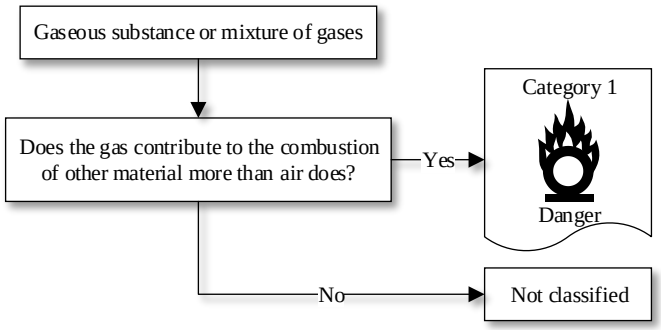


Decision logic 2.3.2 for chemicals under pressure



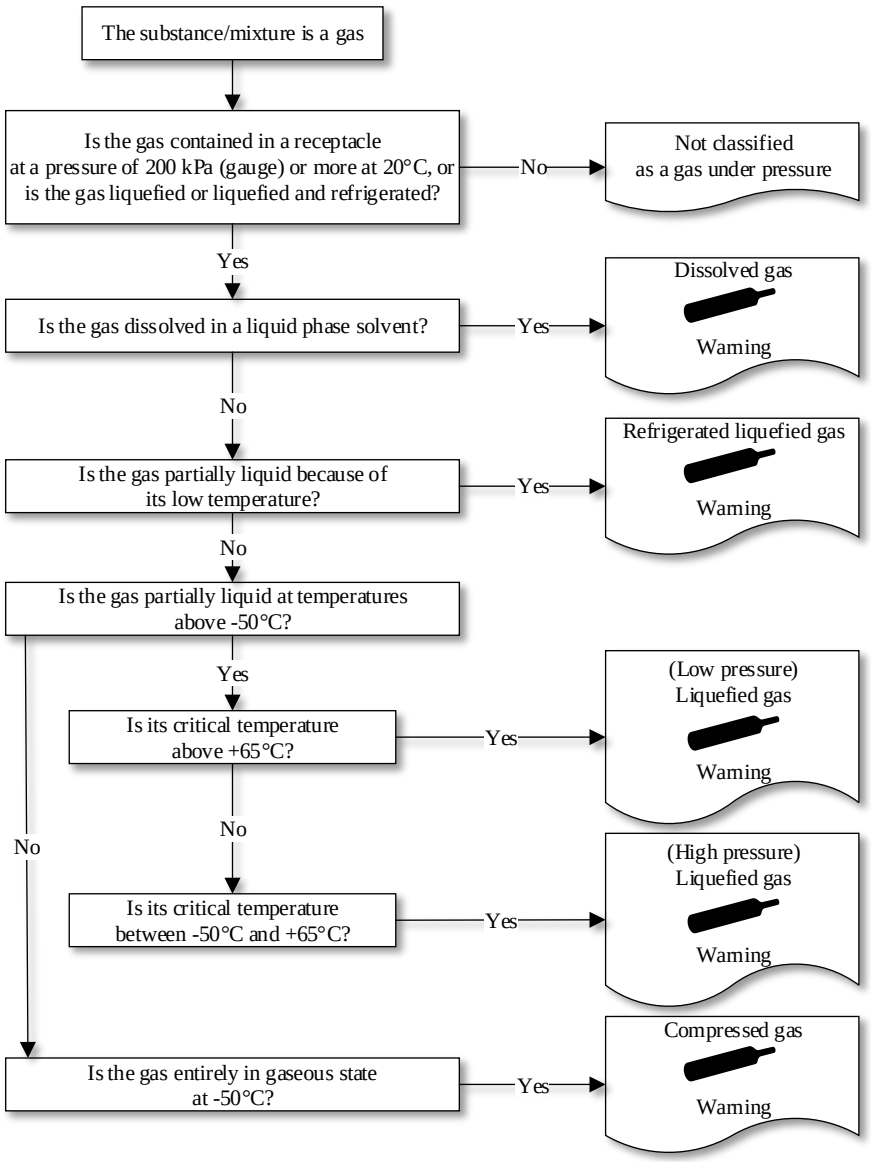
Chapter 2.4: Oxidizing gases

Decision logic 2.4



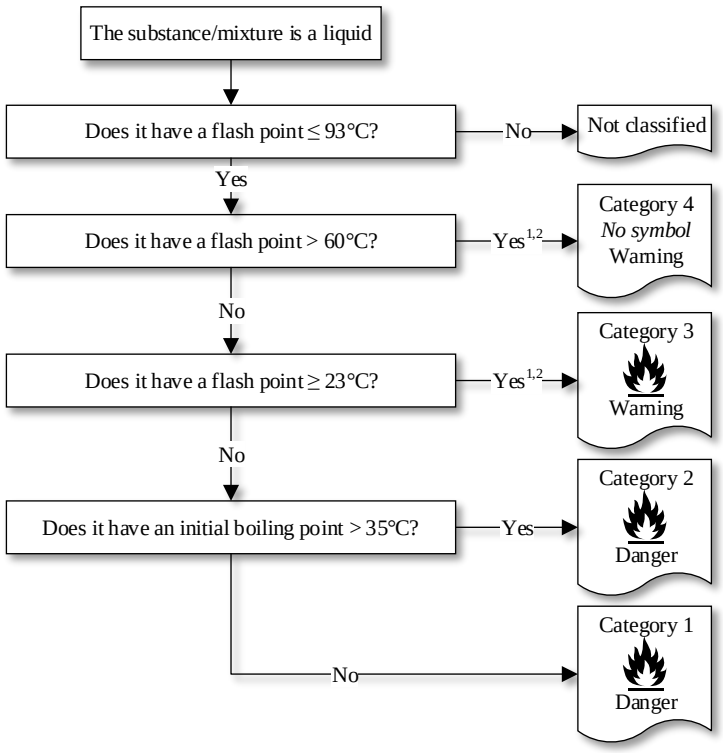
Chapter 2.5: Gases under pressure

Decision logic 2.5



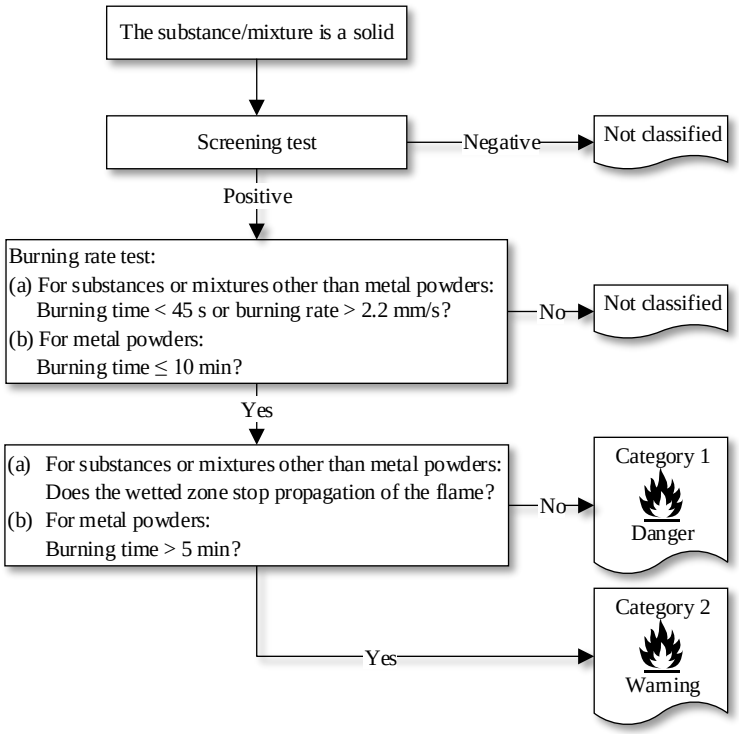
Chapter 2.6: Flammable liquids

Decision logic 2.6



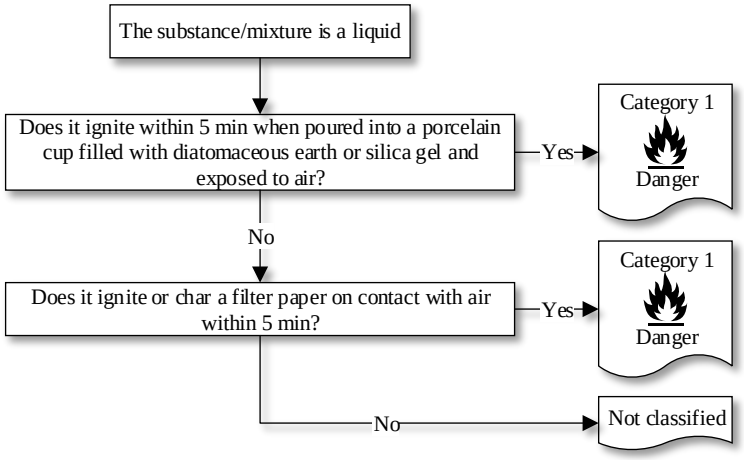
Chapter 2.7: Flammable solids

Decision logic 2.7



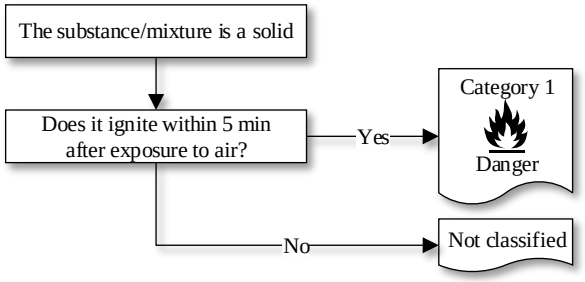
Chapter 2.9: Pyrophoric liquids

Decision logic 2.9



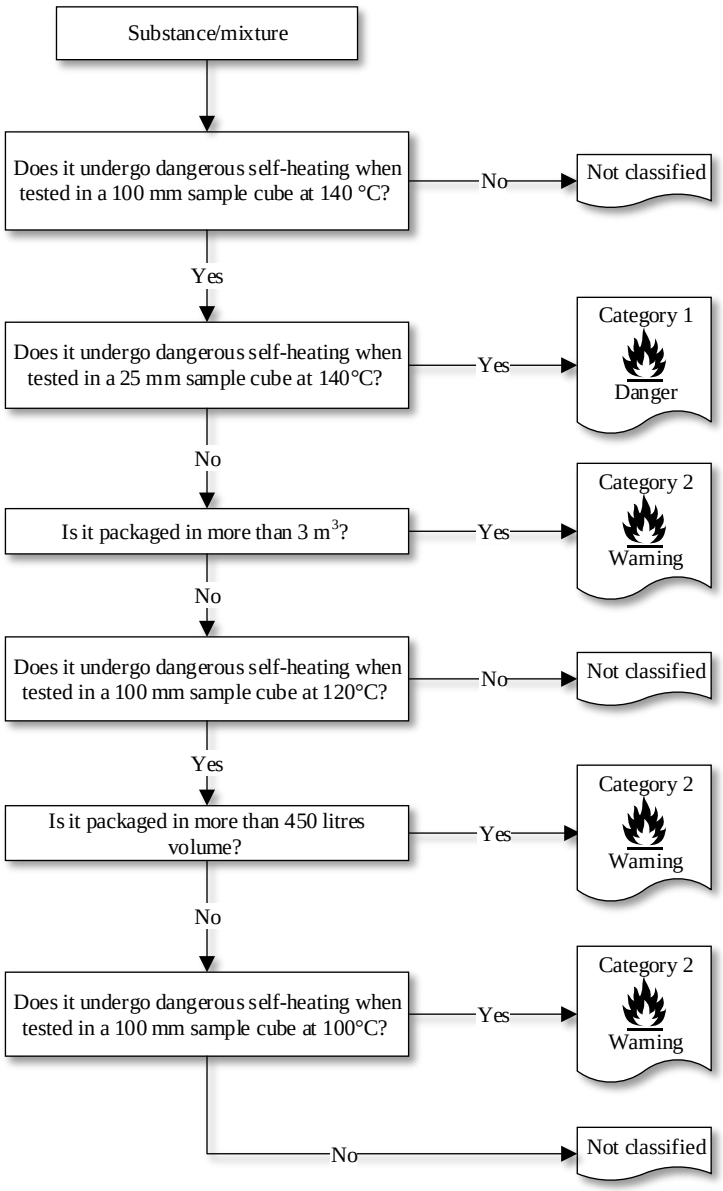
Chapter 2.10: Pyrophoric solids

Decision logic 2.10



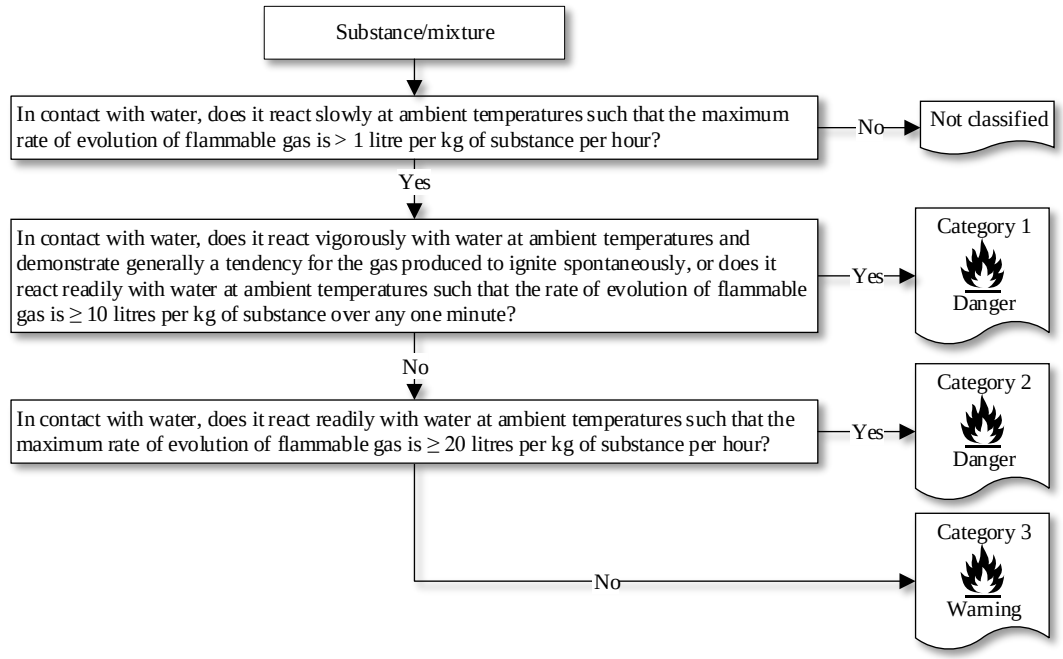
Chapter 2.11: Self-heating substances and mixtures

Decision logic 2.11



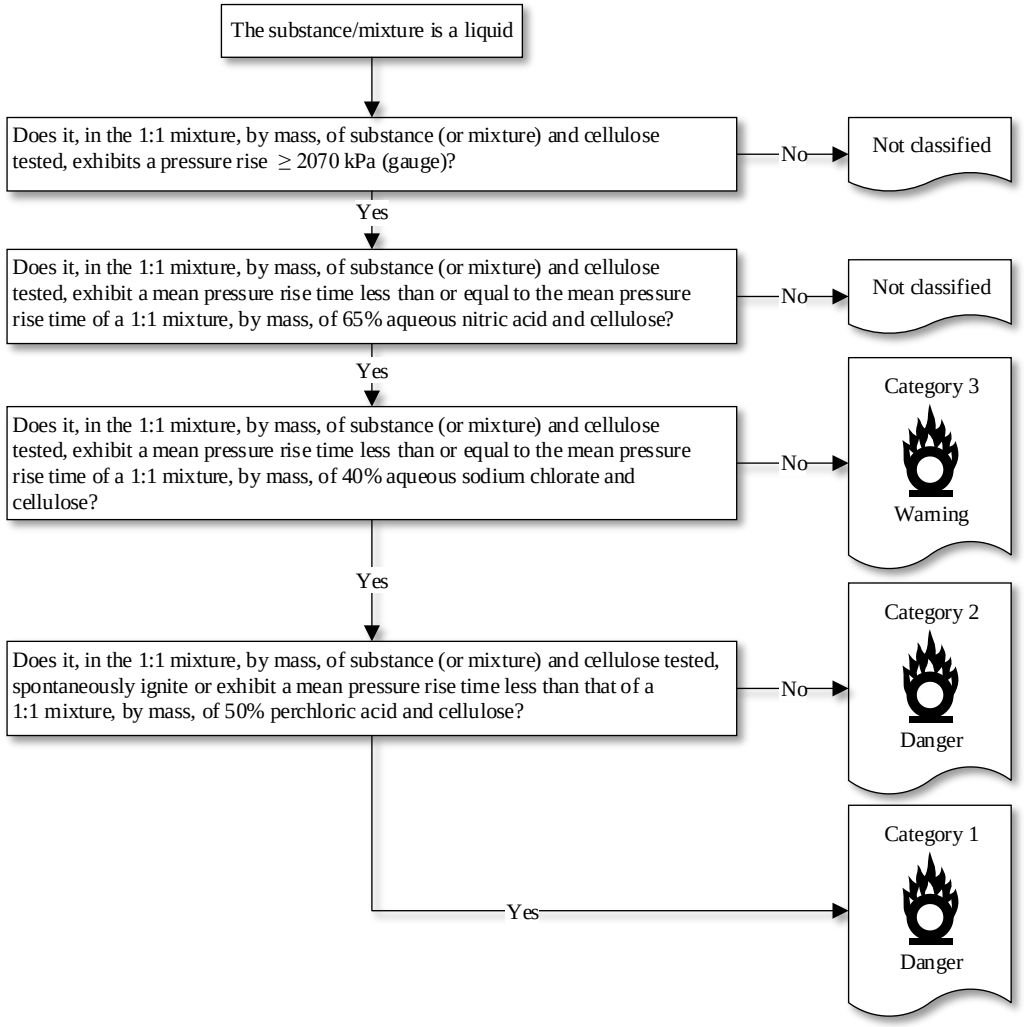
Chapter 2.12: Substances and mixtures which, in contact with water, emit flammable gases

Decision logic 2.12



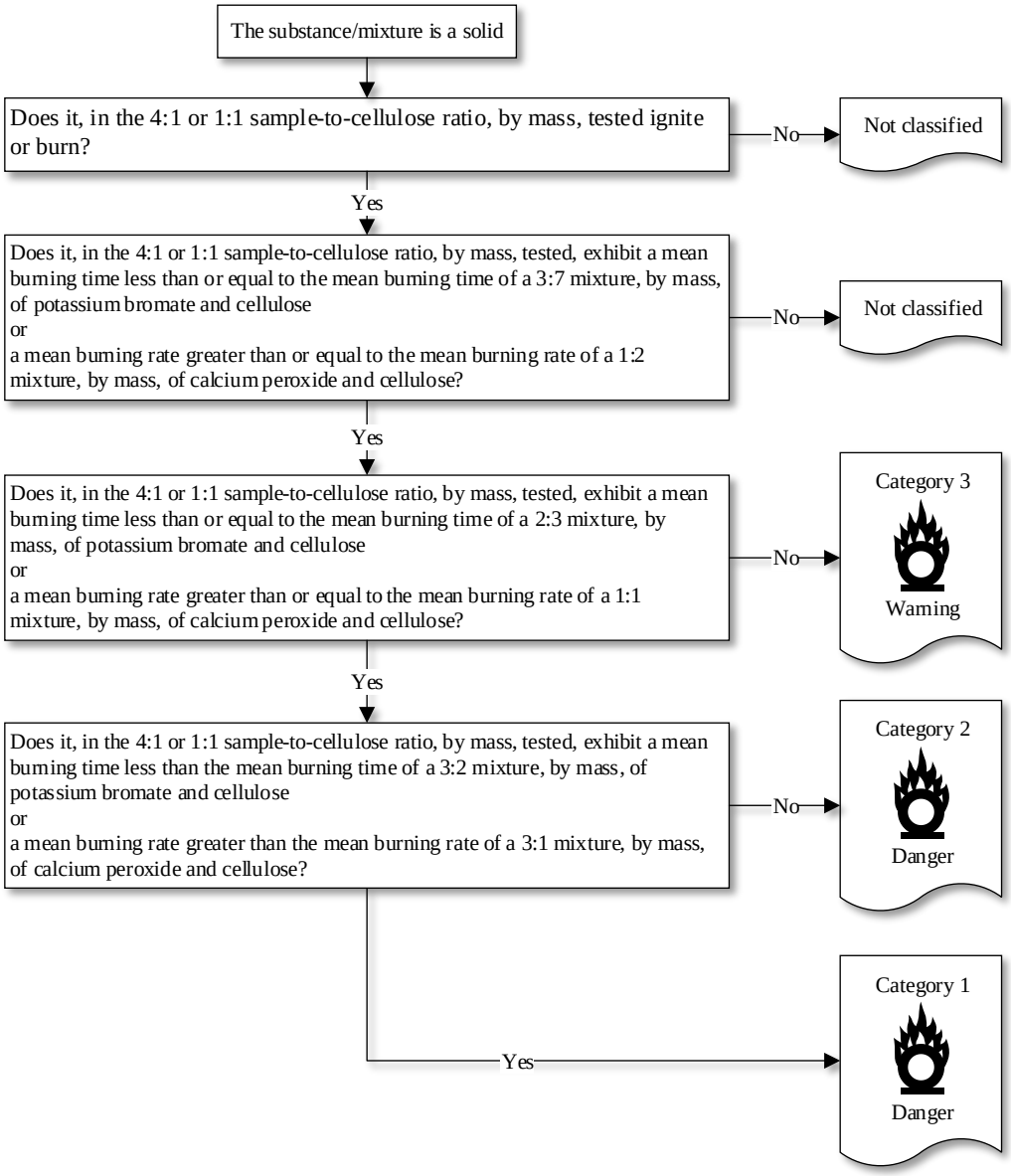
Chapter 2.13: Oxidizing liquids

Decision logic 2.13



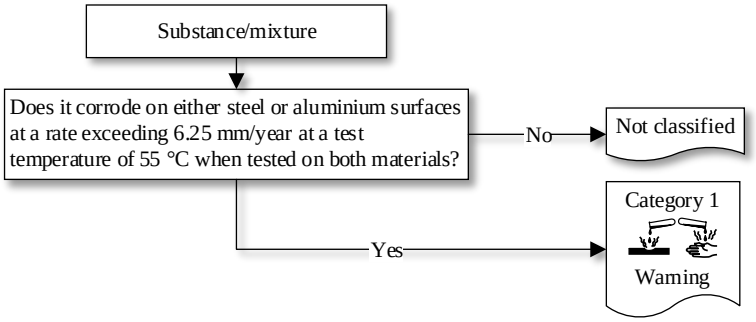
Chapter 2.14: Oxidizing solids

Decision logic 2.14



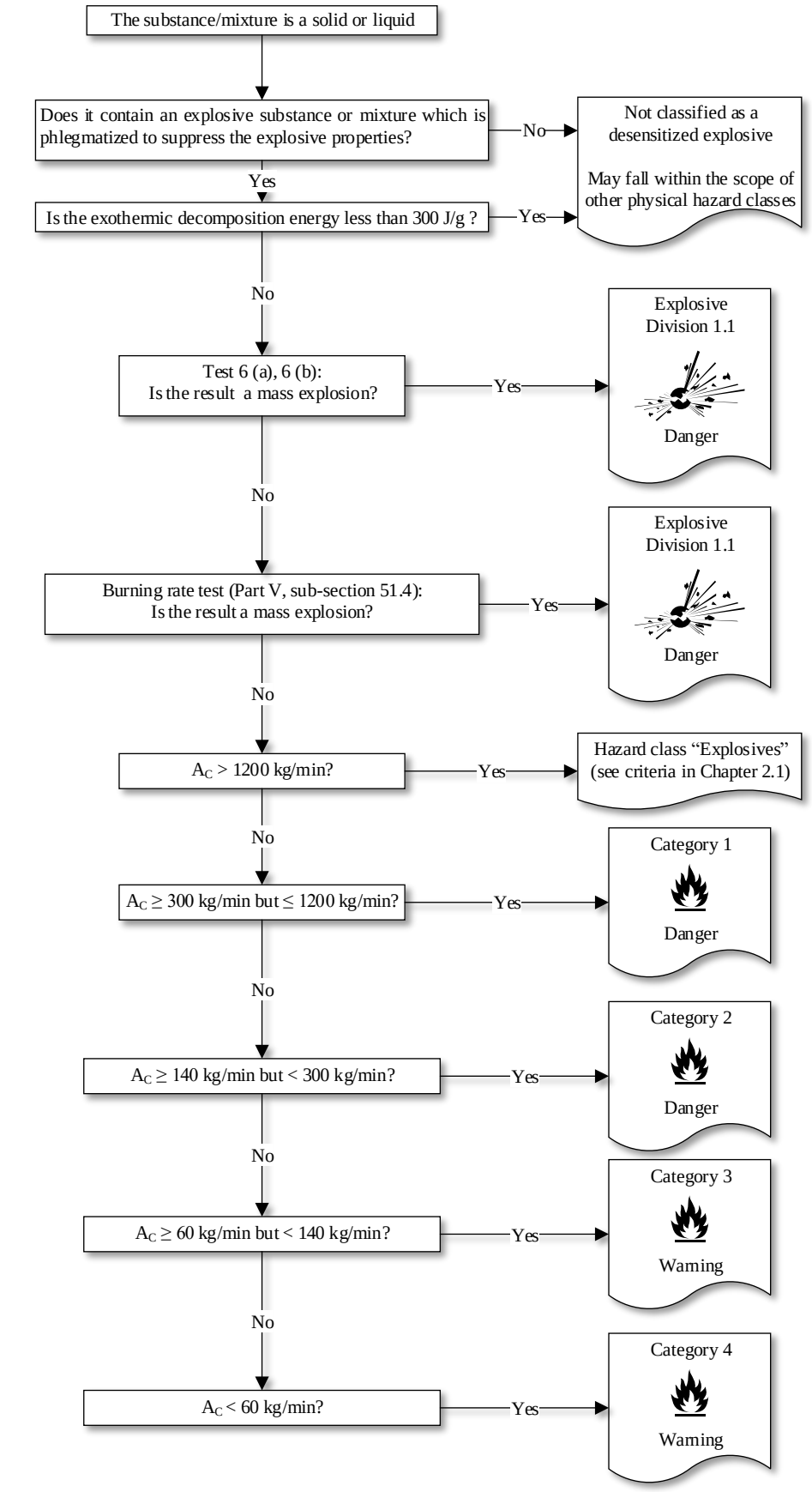
Chapter 2.16: substances and mixtures corrosive to metals

Decision logic 2.16



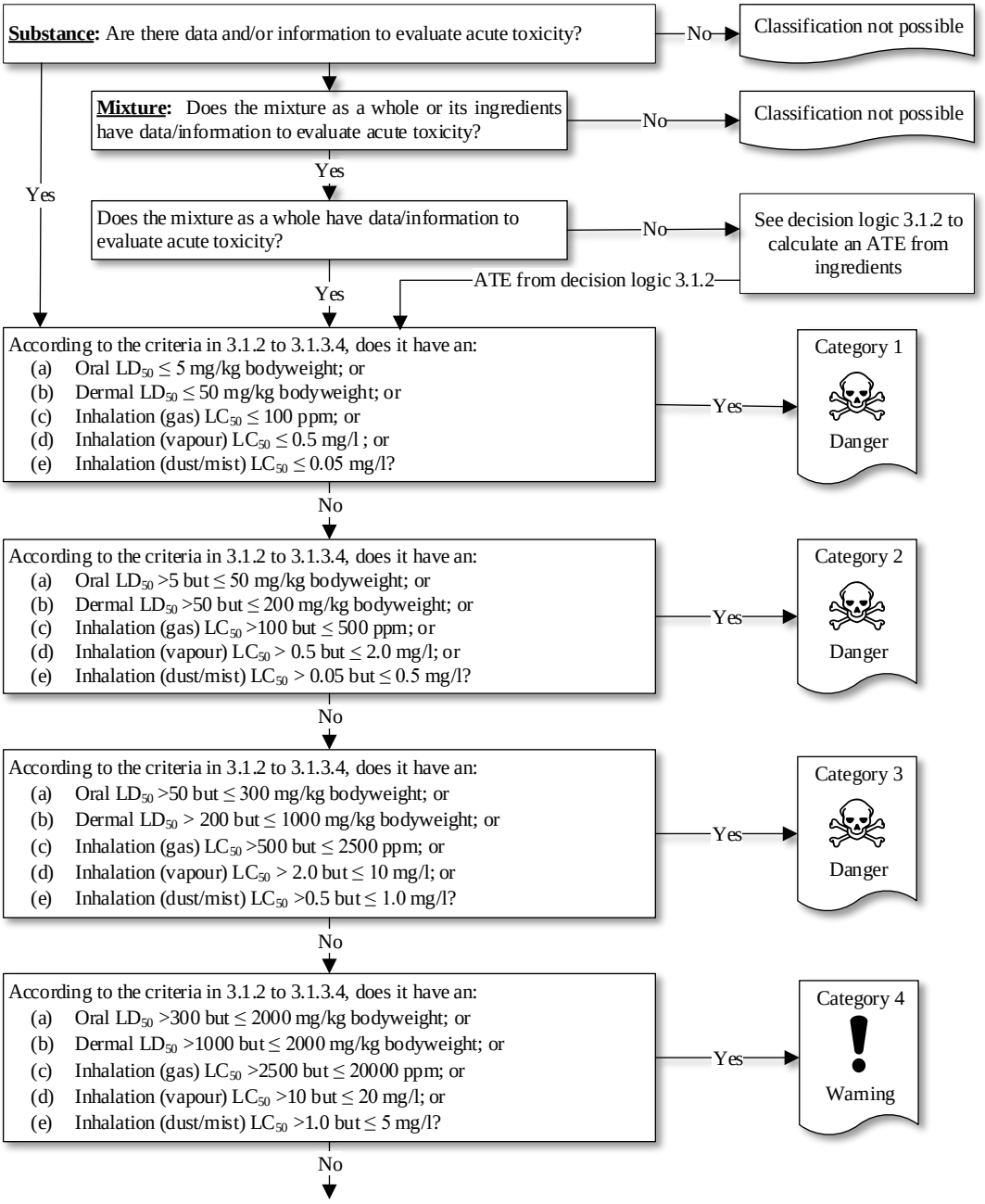
Chapter 2.17: Desensitized explosives

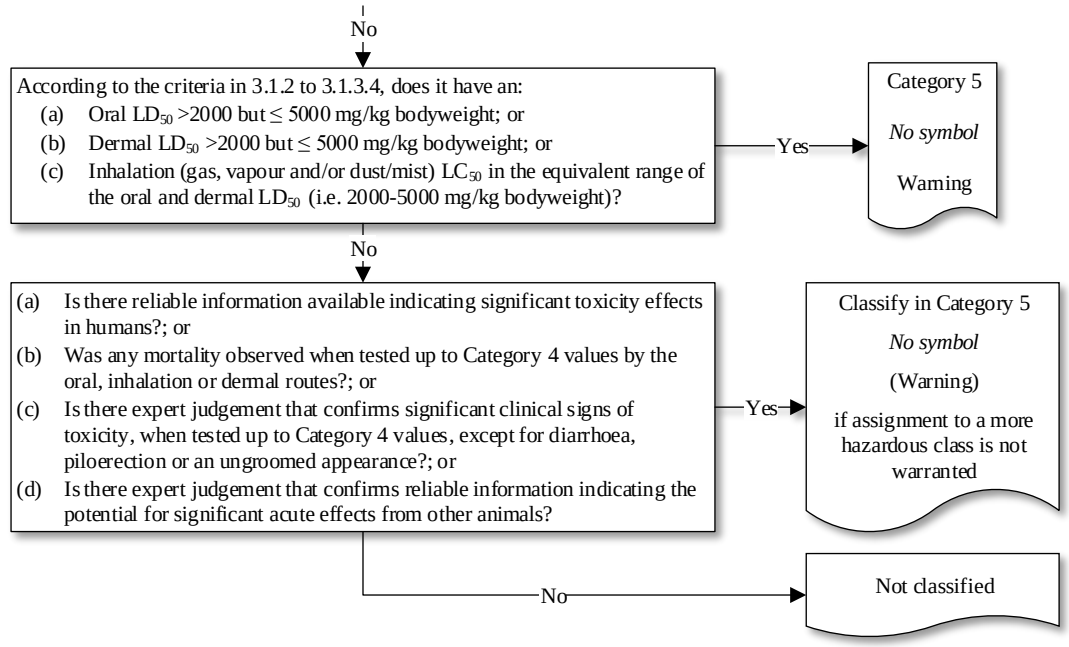
Decision logic 2.17



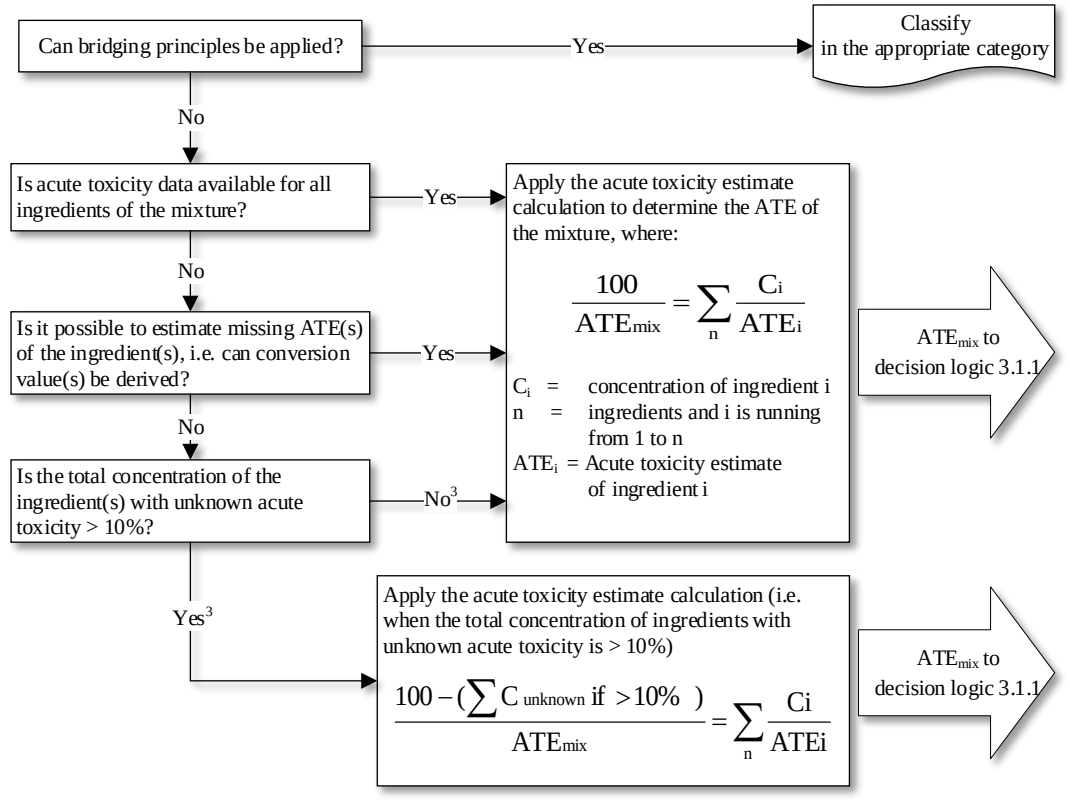
Chapter 3.1: Acute toxicity

Decision logic 3.1.1



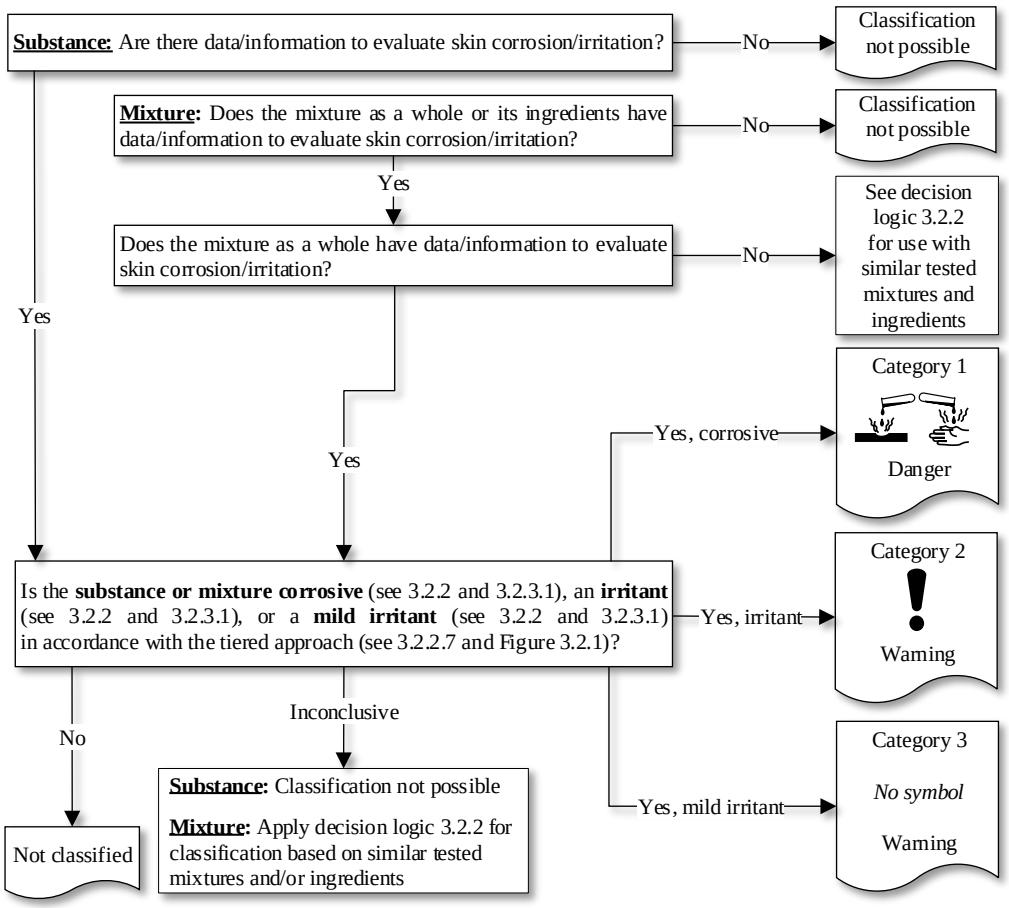


Decision logic 3.1.2

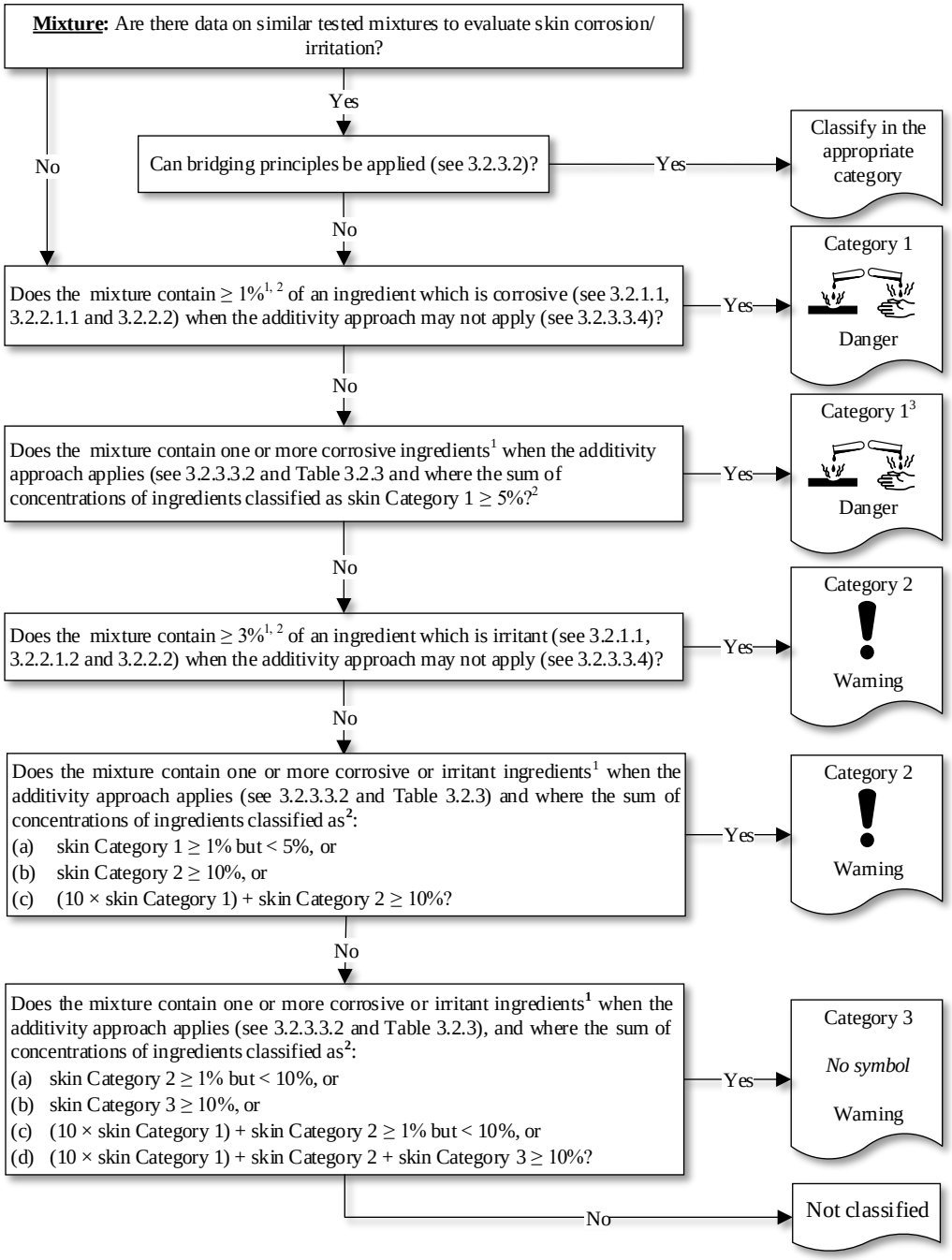


Chapter 3.2: Skin corrosion/irritation

Decision logic 3.2.1

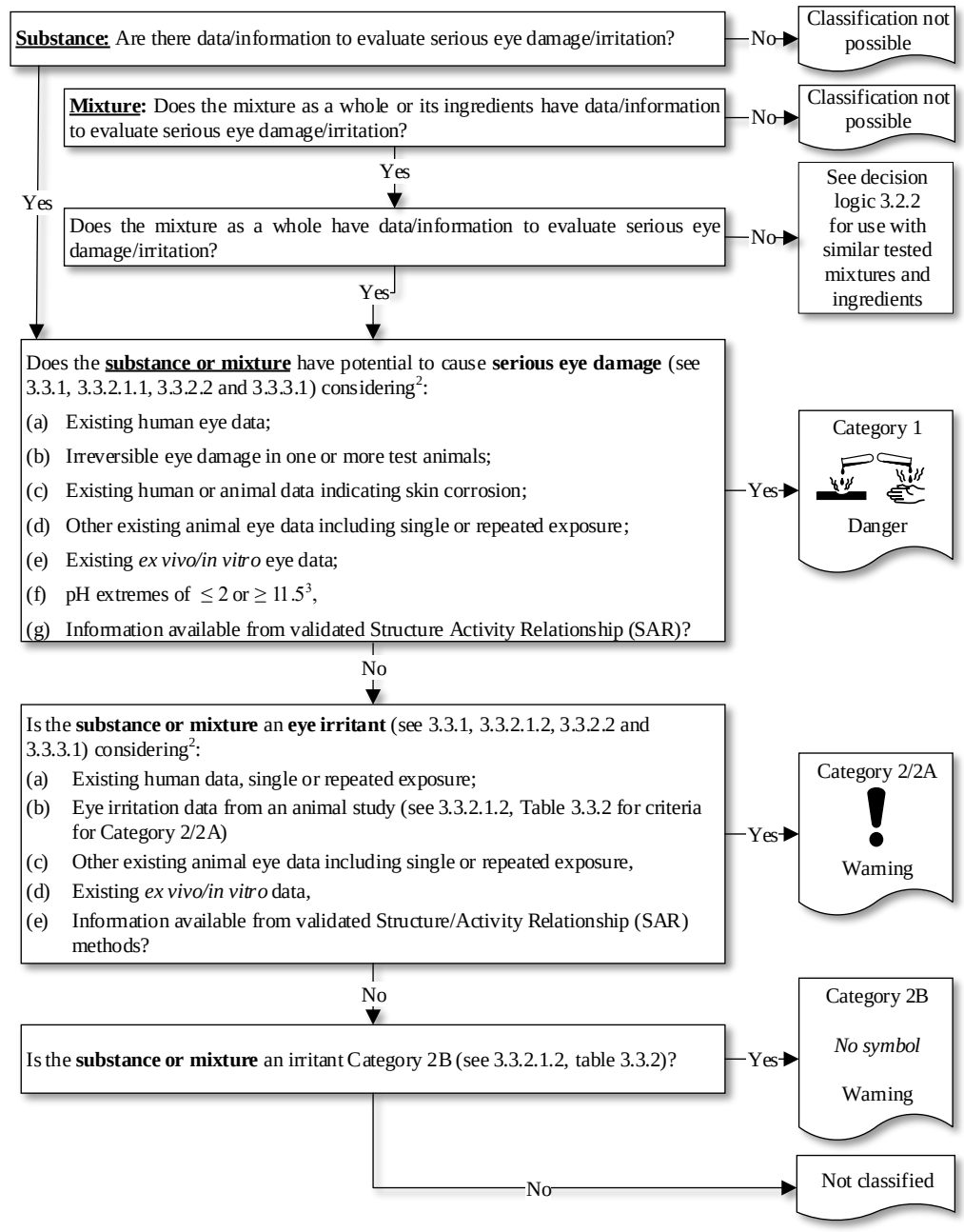


Decision logic 3.2.2

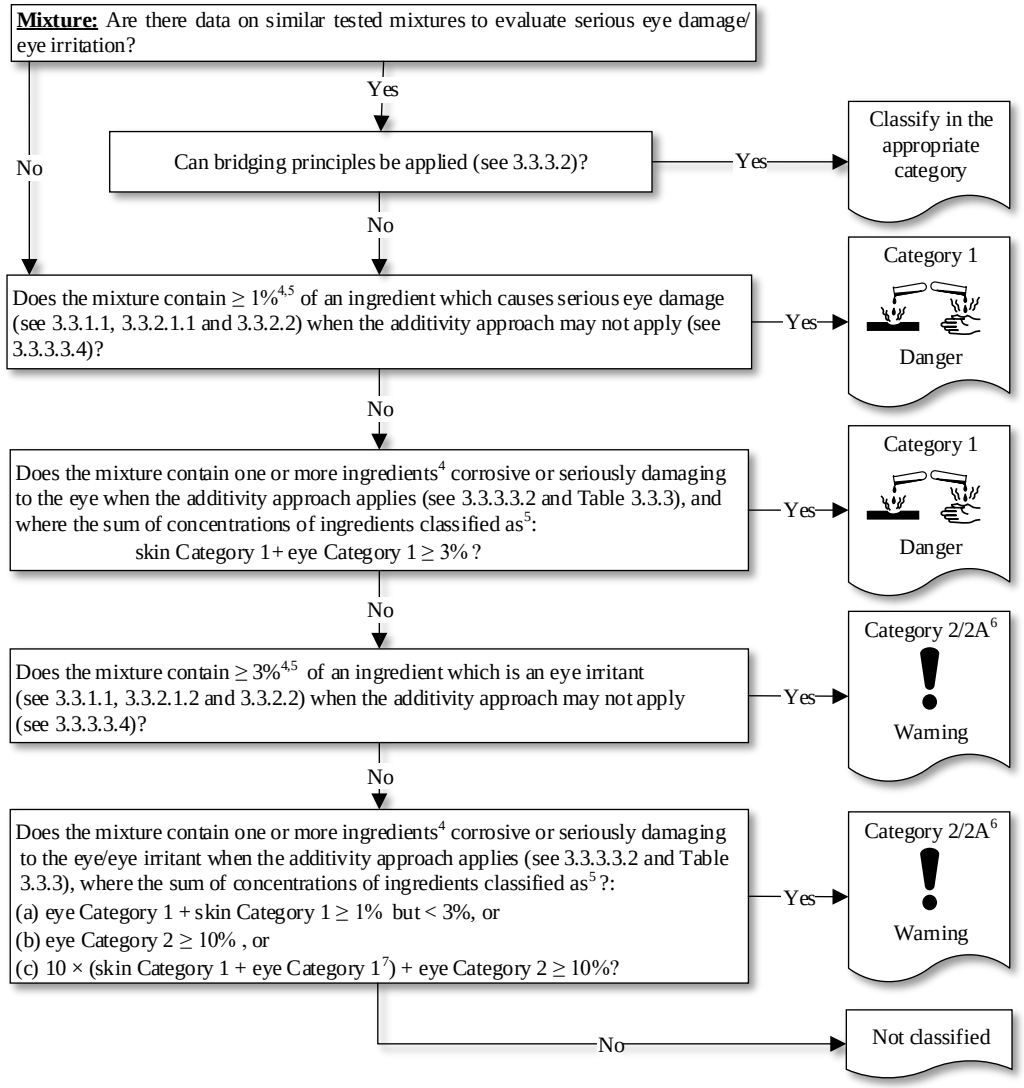


Chapter 3.3: Serious eye damage/eye irritation

Decision logic 3.3.1

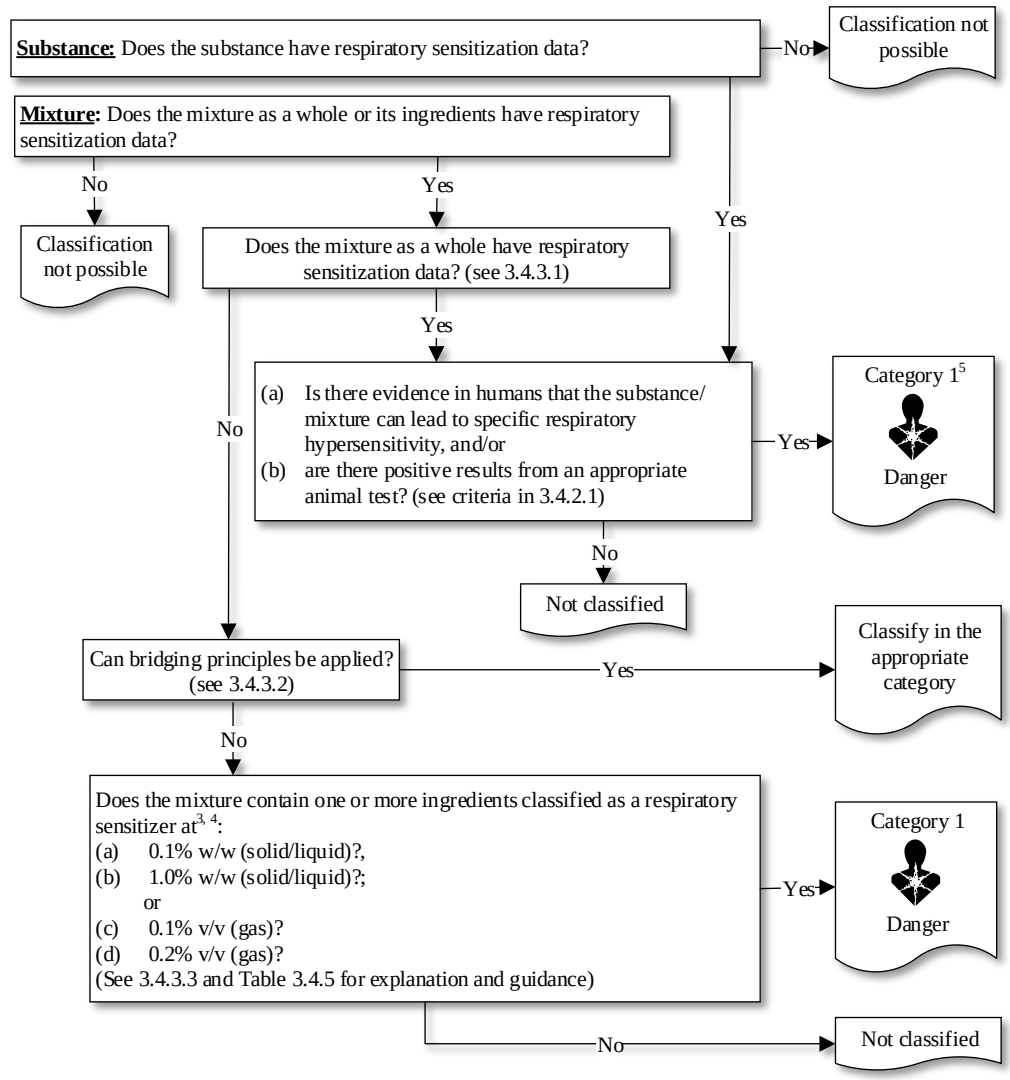


Decision logic 3.3.2

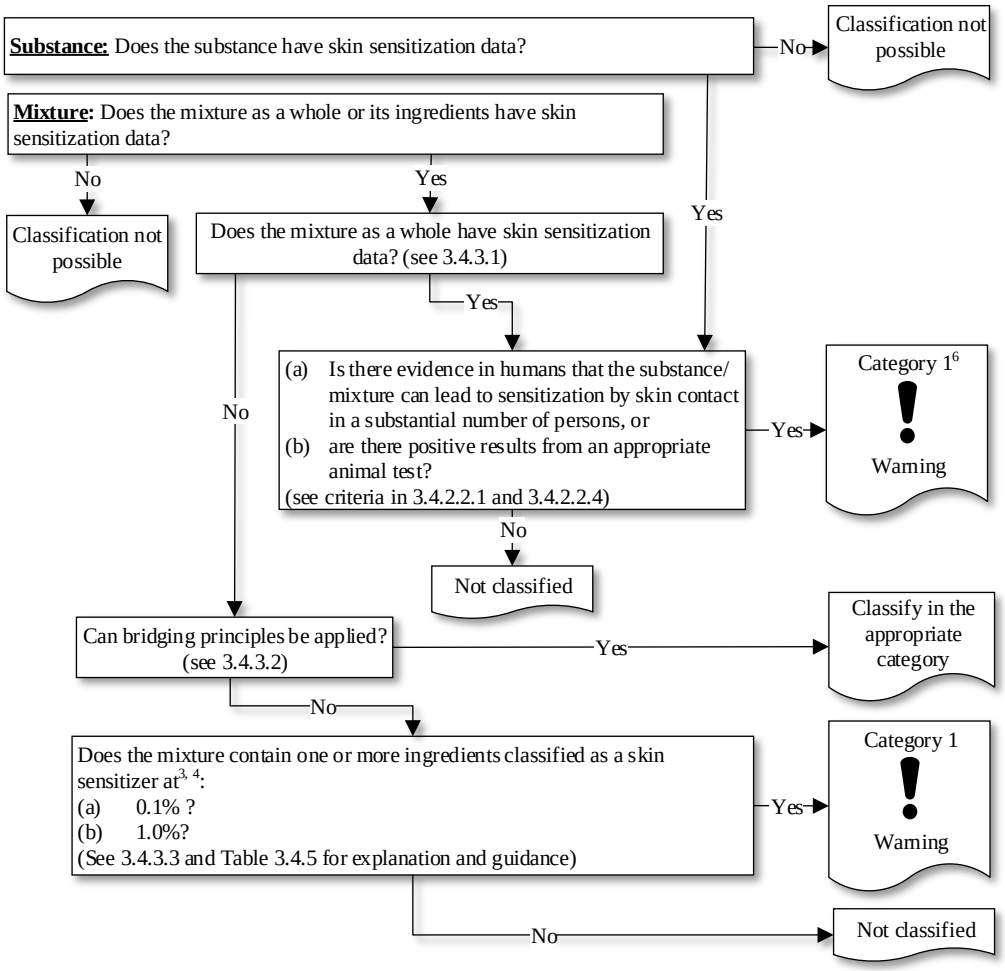


Chapter 3.4: Respiratory and skin sensitization

Decision logic 3.4.1

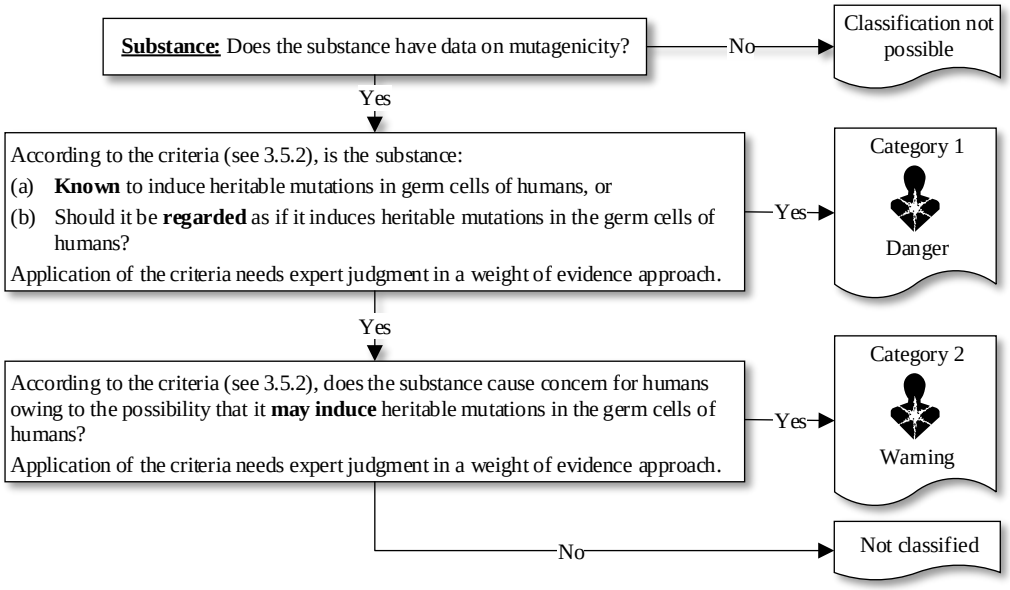


Decision logic 3.4.2



Chapter 3.5: Germ cell mutagenicity

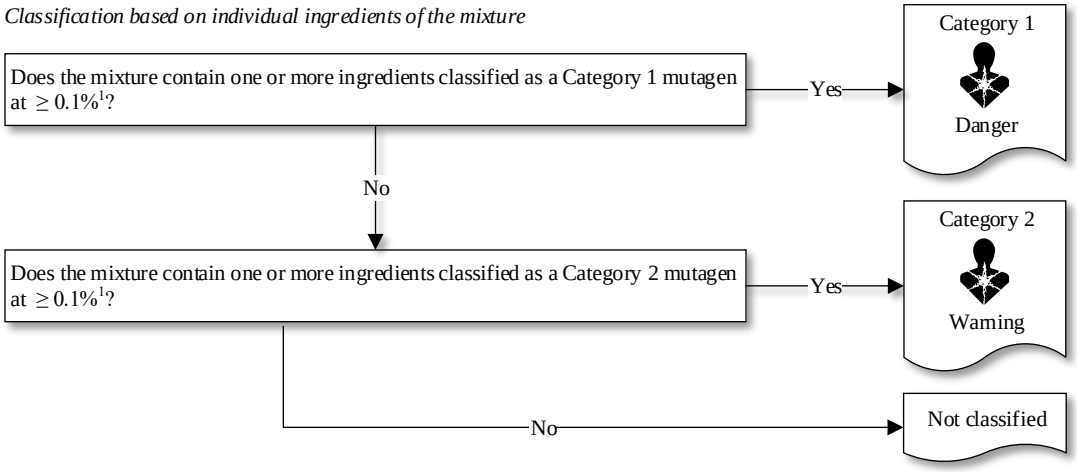
Decision logic 3.5.1



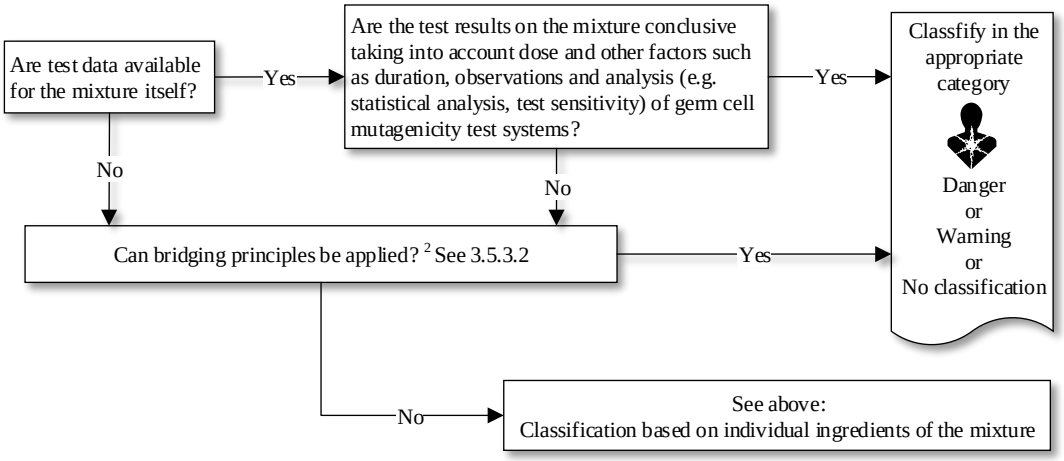
Decision logic 3.5.2

Mixture: Classification of mixtures will be based on the available test data for the **individual ingredients** of the mixture, using cut-off values/concentration limits for those ingredients. The classification may **be modified on a case-by-case basis** based on the available test data for the mixture itself or based on bridging principles. See modified classification on a case-by-case basis below. For further details see 3.5.3.

Classification based on individual ingredients of the mixture

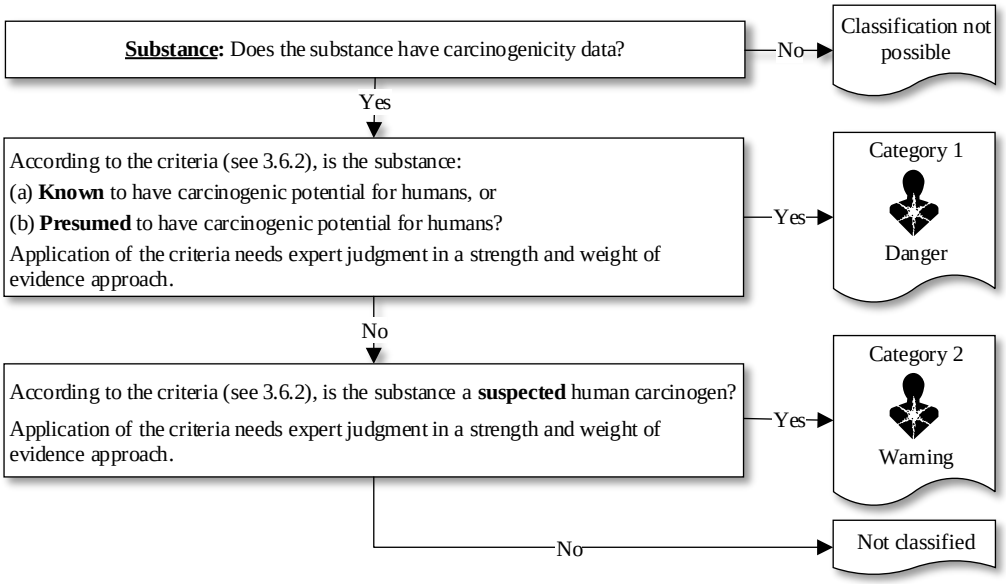


Classification based on a case-by-case basis



Chapter 3.6: Carcinogenicity

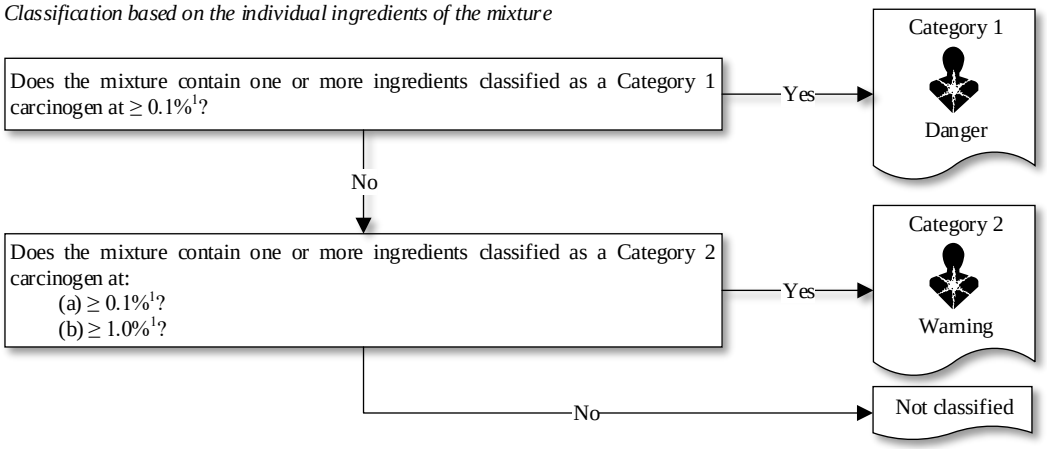
Decision logic 3.6.1



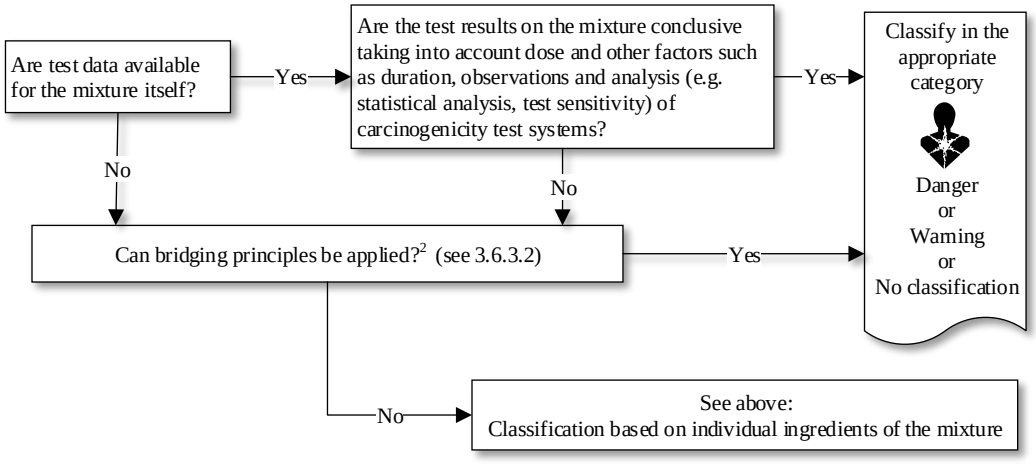
Decision logic 3.6.2

Mixture: Classification of mixtures will be based on the available test data for the **individual ingredients** of the mixture, using cut-off values/concentration limits for those ingredients. The classification may be **modified on a case-by-case basis** based on the available test data for the mixture as a whole or based on bridging principles. See modified classification on a case-by-case basis below. For further details see 3.6.2.7, 3.6.3.1 and 3.6.3.2.

Classification based on the individual ingredients of the mixture

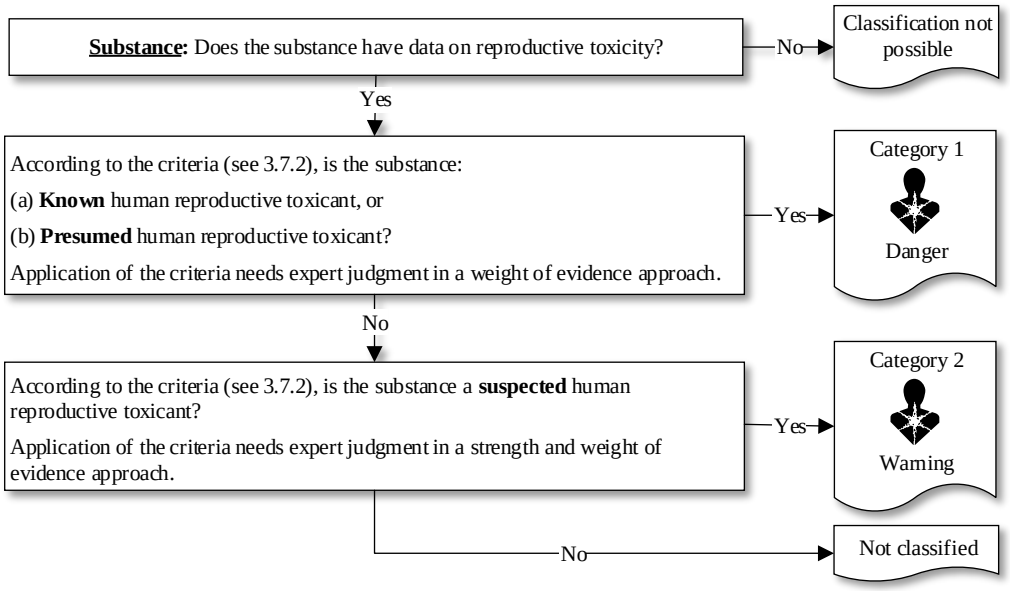


Modified classification on a case-by-case basis



Chapter 3.7: Reproductive toxicity

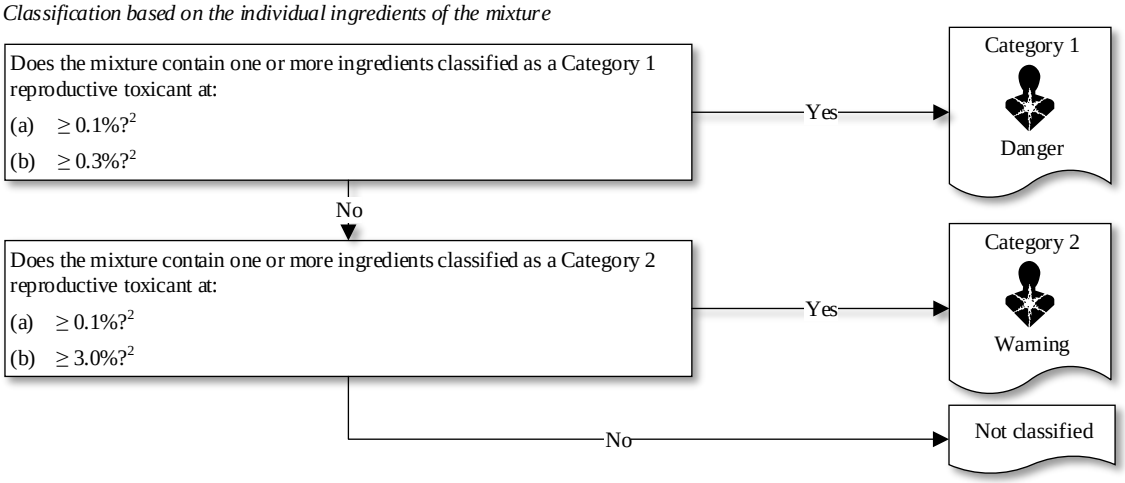
Decision logic 3.7.1



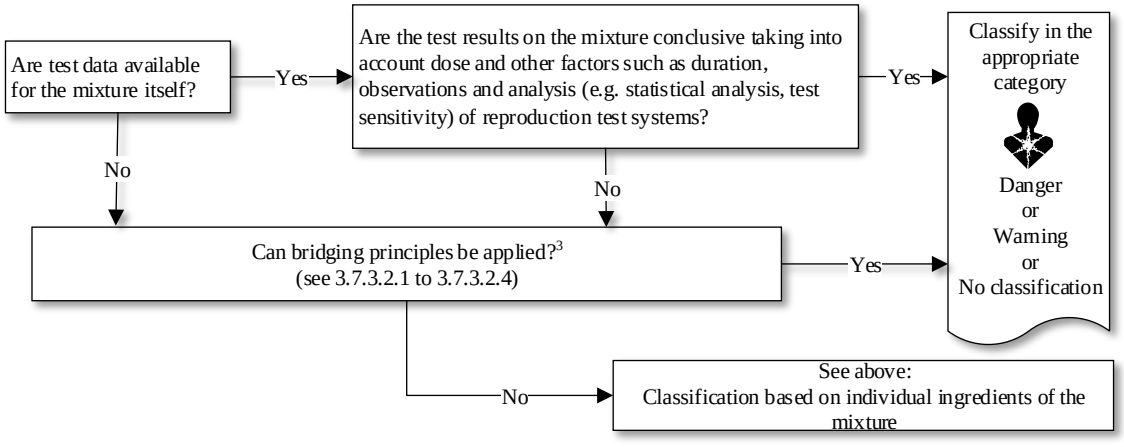
Decision logic 3.7.2

Mixture: Classification of mixtures will be based on the available test data for the **individual ingredients** of the mixture, using cut-off values/concentration limits for those ingredients. The classification may be **modified on a case-by-case basis** based on the available test data for the mixture as a whole or based on bridging principles. See modified classification on a case-by-case basis below. For further details see 3.7.3.1, 3.7.3.2 and 3.7.3.3.

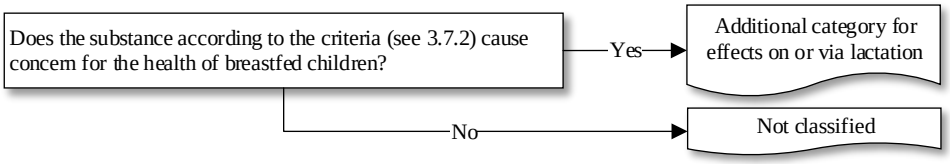
Classification based on the individual ingredients of the mixture



Modified classification on a case-by-case basis



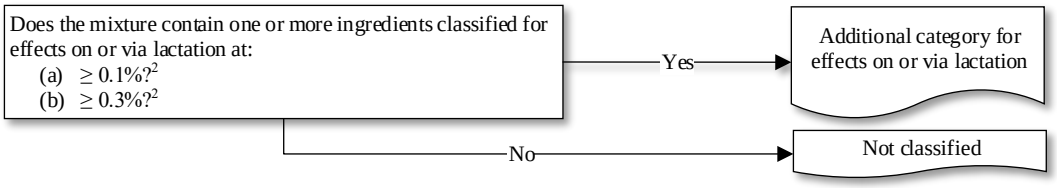
Decision logic 3.7.3



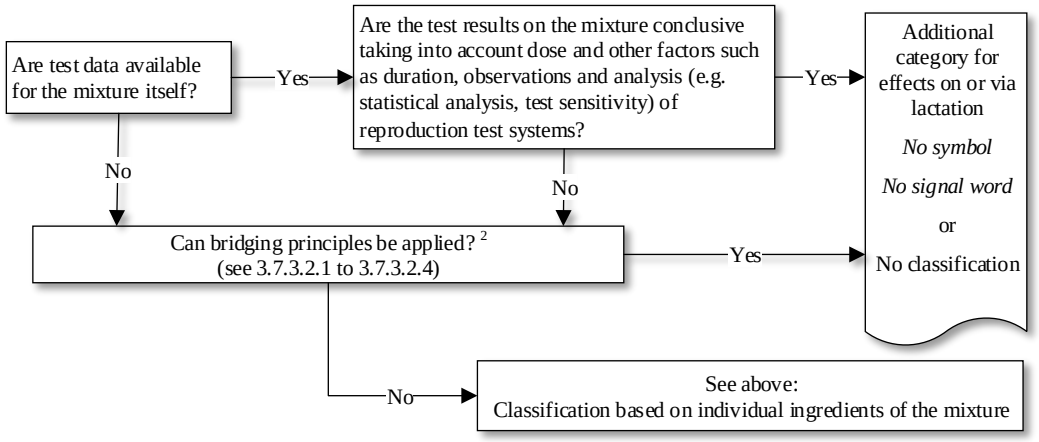
Decision logic 3.7.4

Mixture: Classification of mixtures will be based on the available test data for the **individual ingredients** of the mixture, using cut-off values/concentration limits for those ingredients. The classification may be **modified on a case-by-case basis** based on the available test data for the mixture as a whole or based on bridging principles. See modified classification on a case-by-case basis below. For further details see 3.7.3.1, 3.7.3.2 and 3.7.3.3.

Classification based on the individual ingredients of the mixture

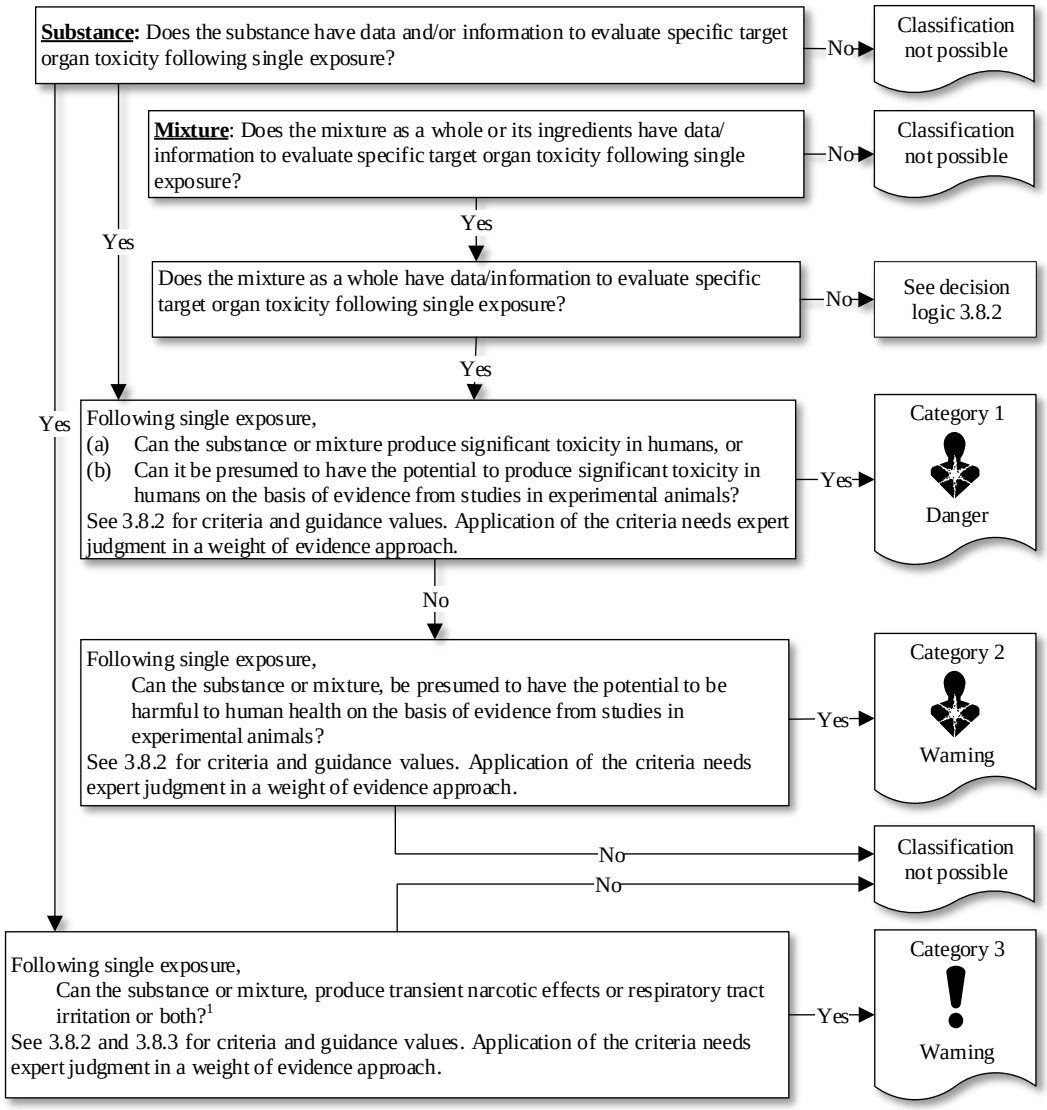


Modified classification on a case-by-case basis

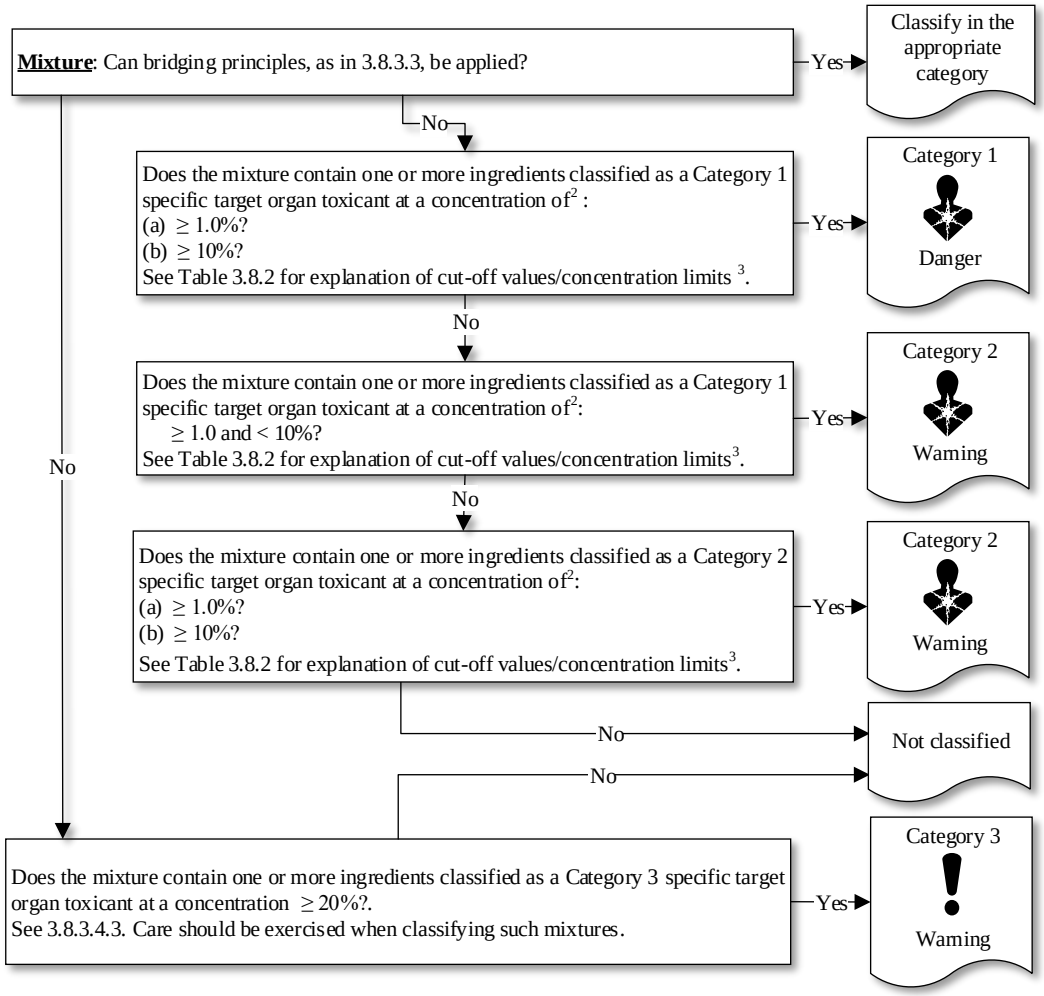


Chapter 3.8: Specific target organ toxicity (single exposure)

Decision logic 3.8.1

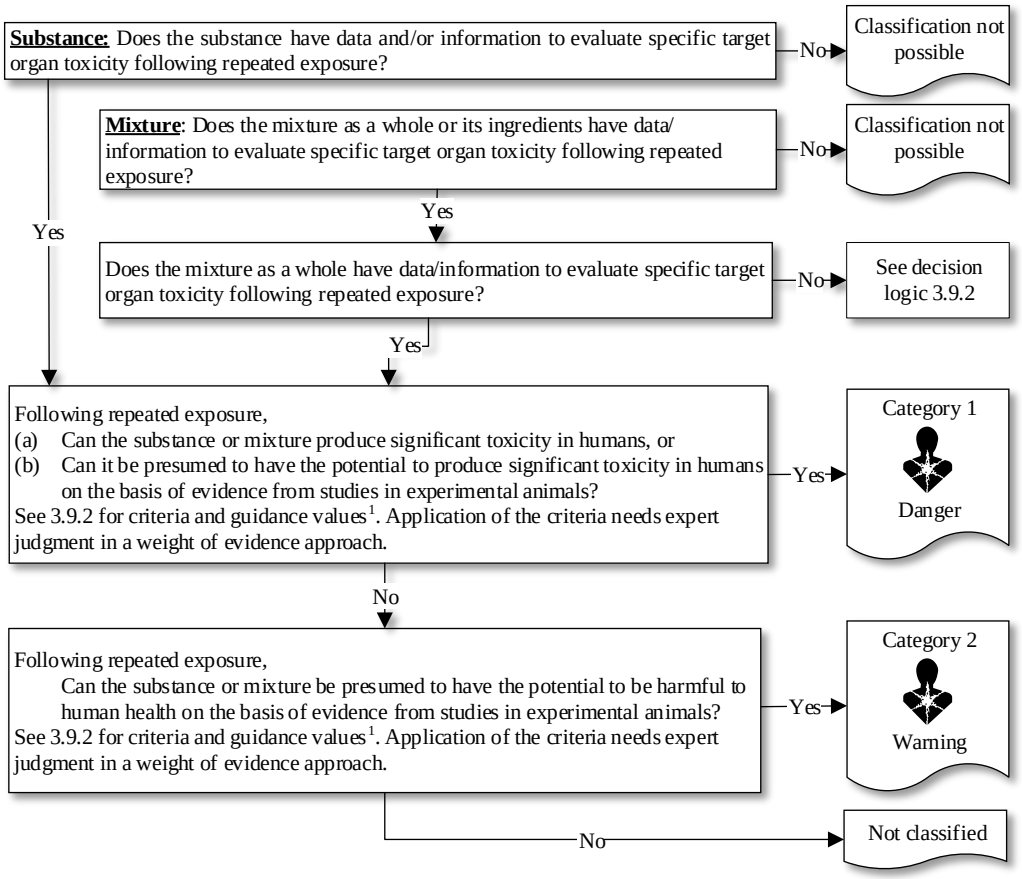


Decision logic 3.8.2

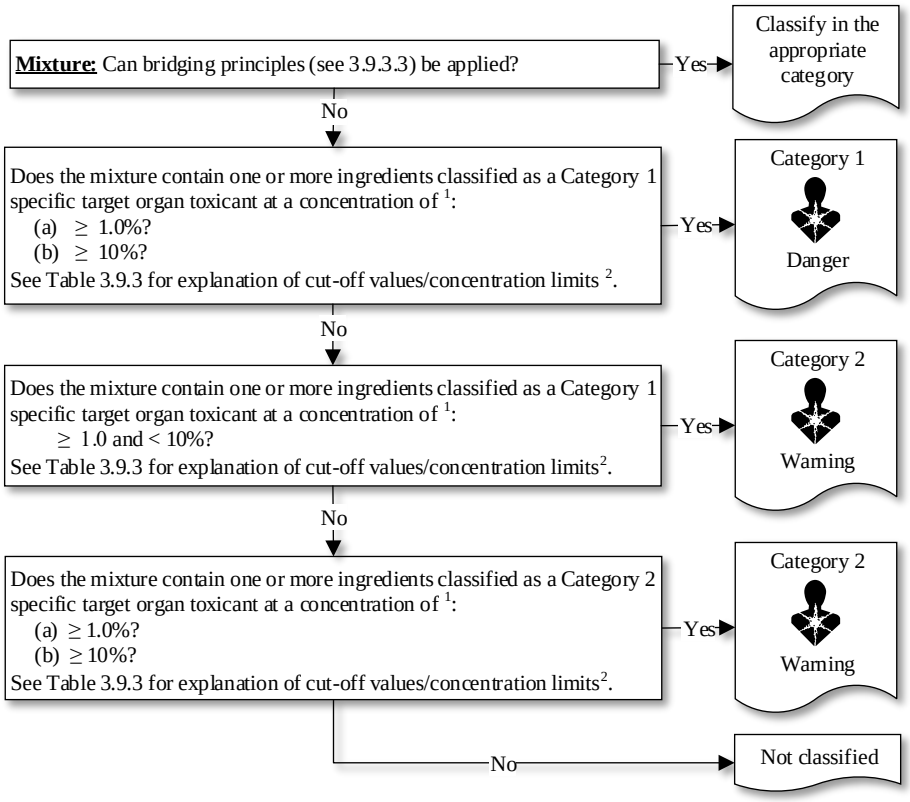


Chapter 3.9: Specific target organ toxicity (repeated exposure)

Decision logic 3.9.1

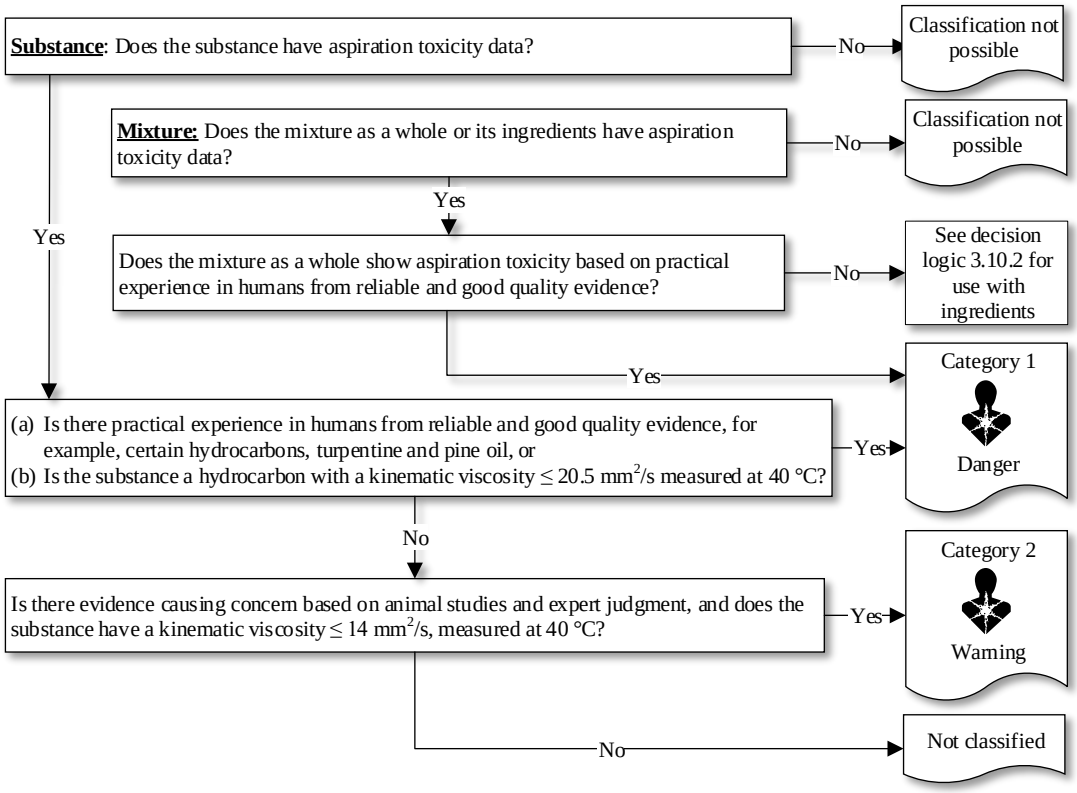


Decision logic 3.9.2

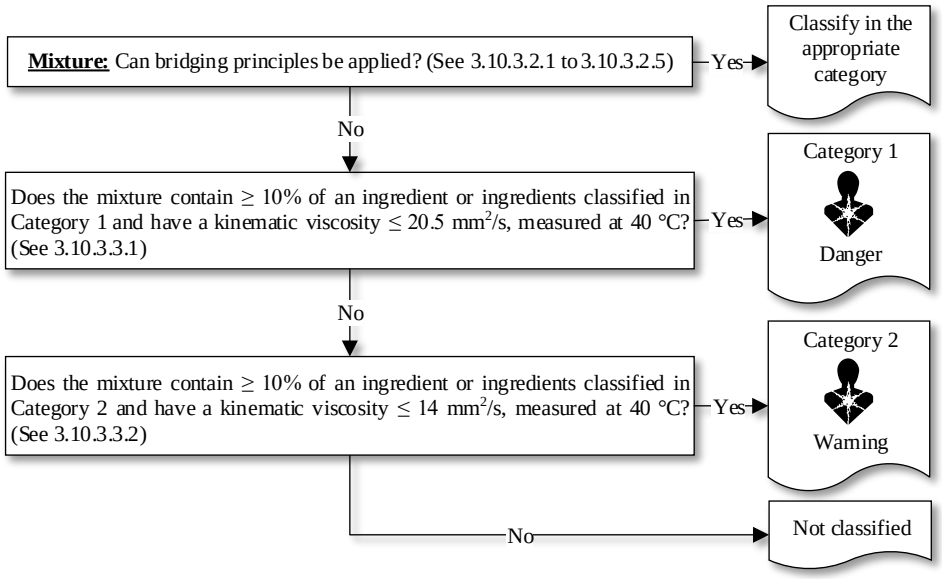


Chapter 3.10: Aspiration toxicity

Decision logic 3.10.1

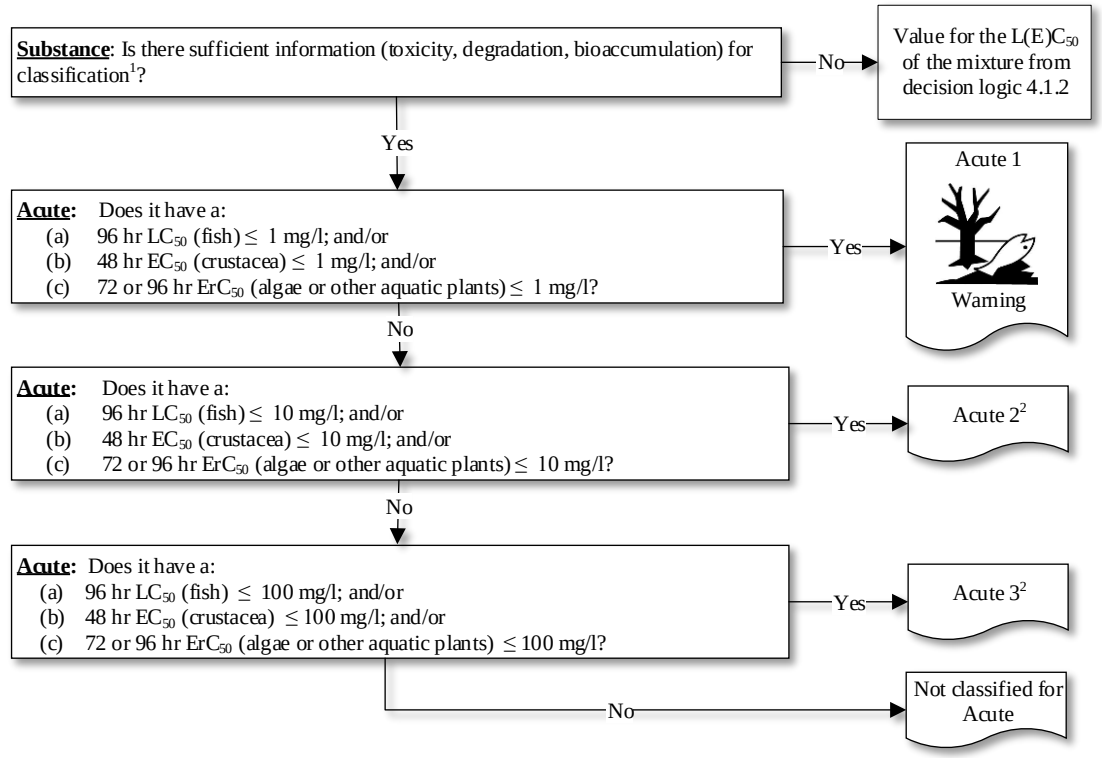


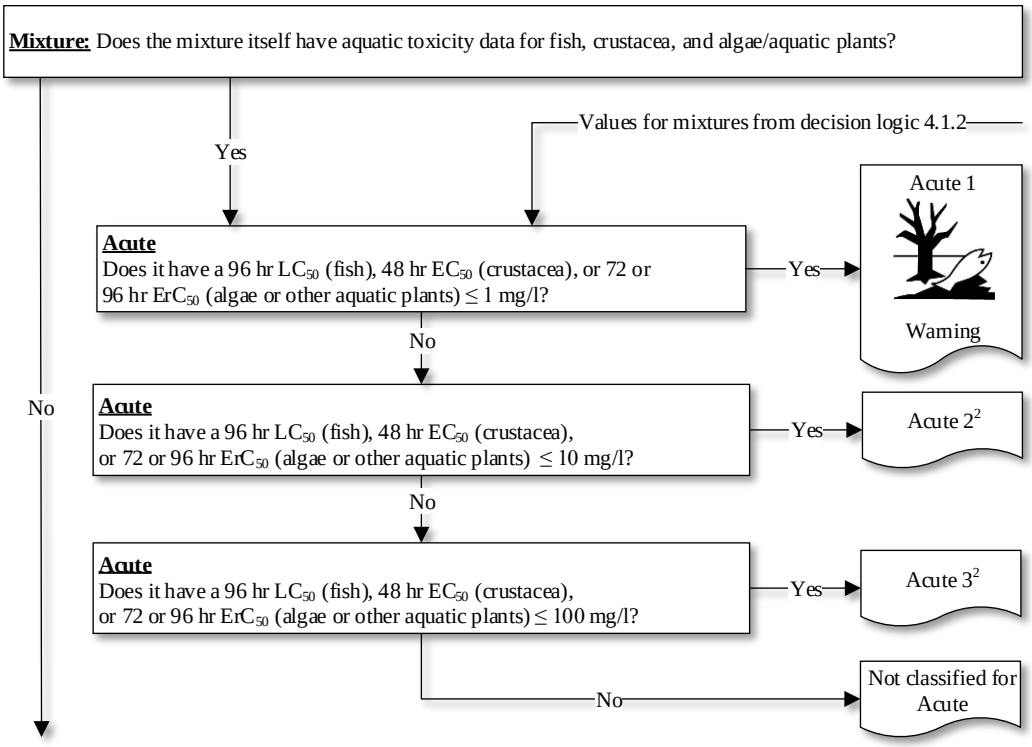
Decision logic 3.10.2

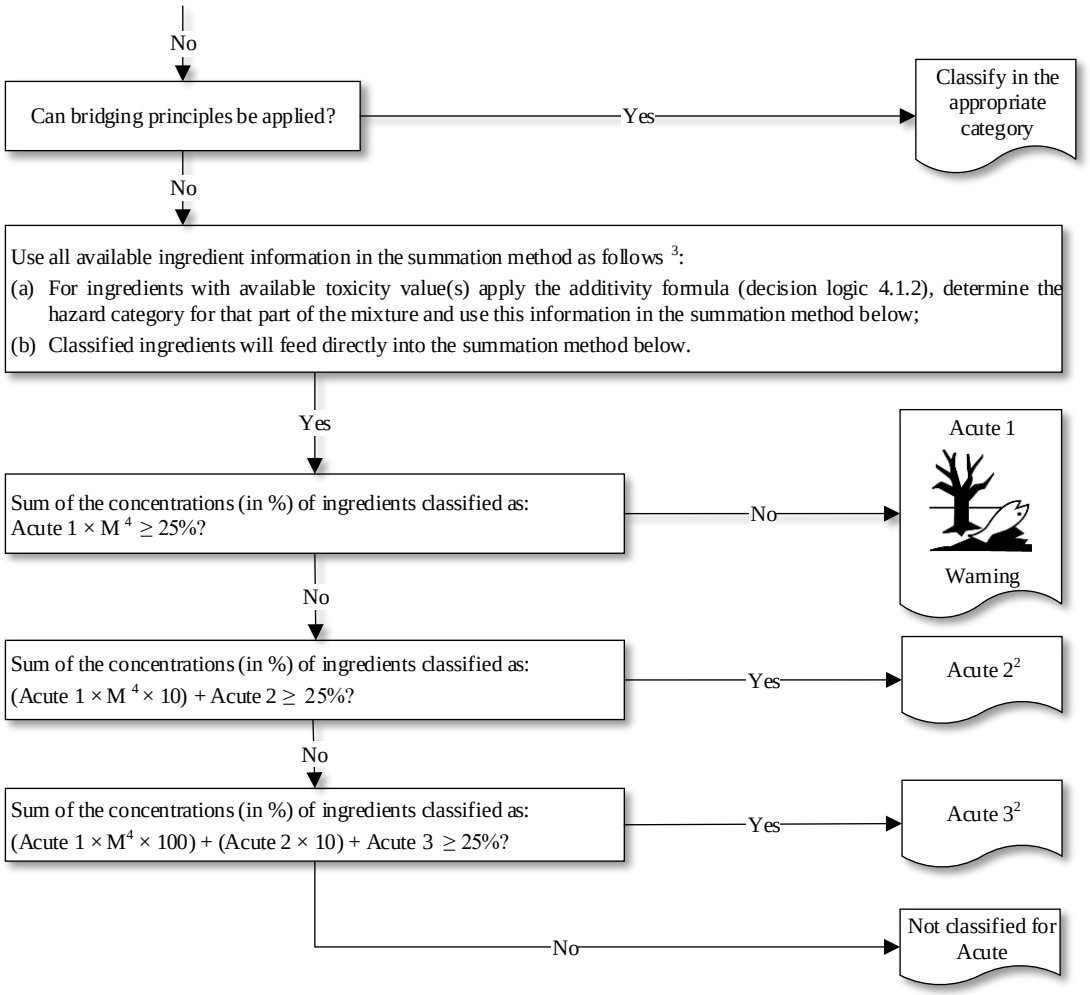


Chapter 4.1: Hazardous to the aquatic environment

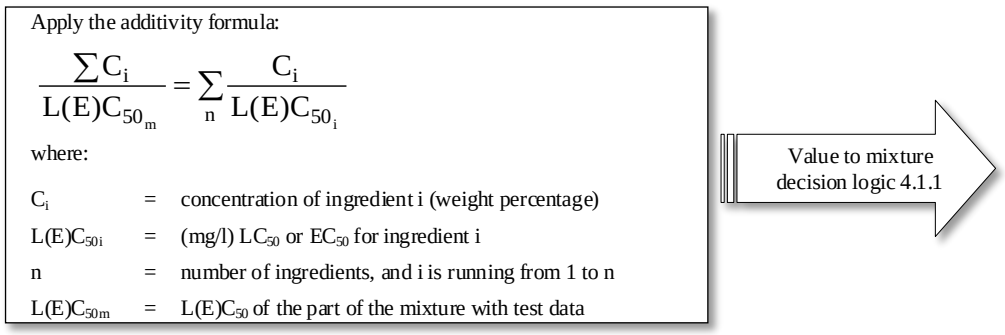
Decision logic 4.1.1



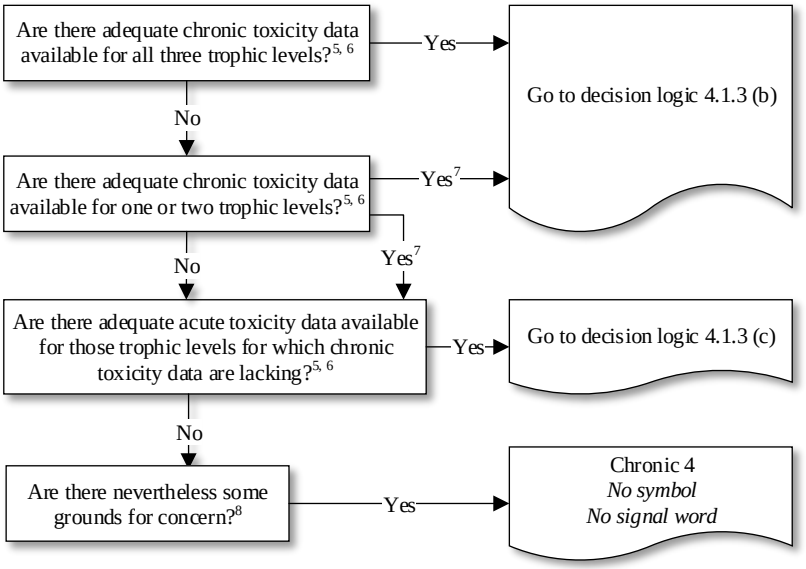




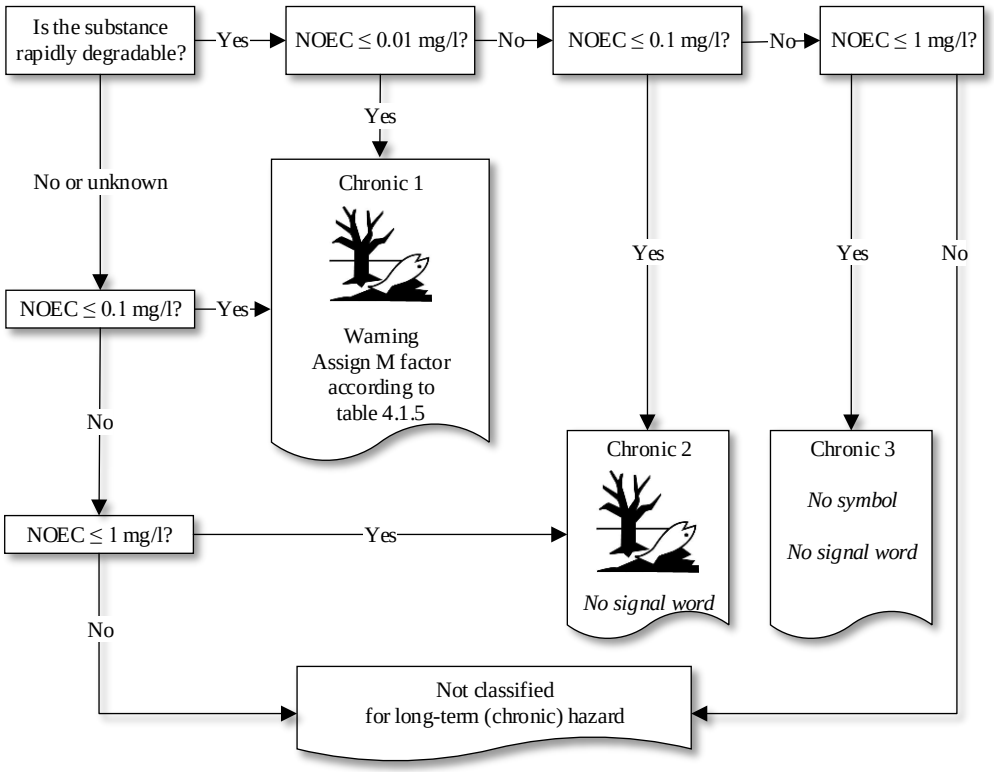
Decision logic 4.1.2



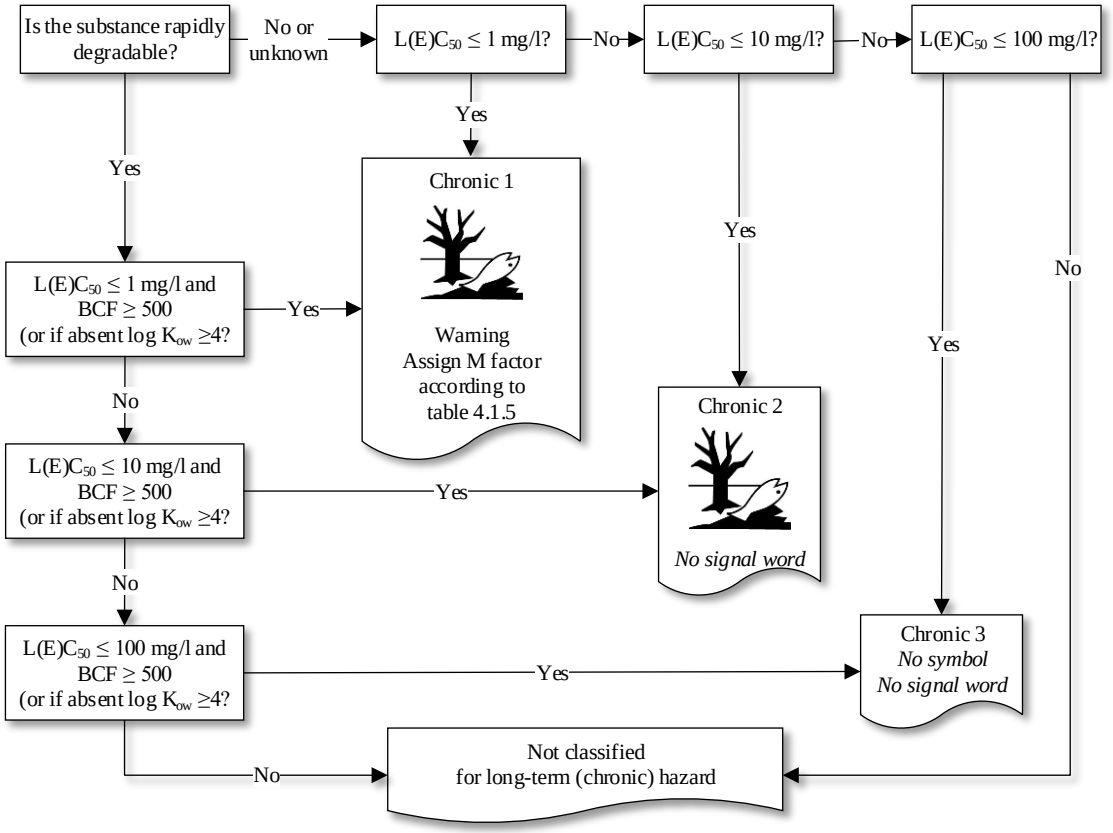
Decision logic 4.1.3 (a)



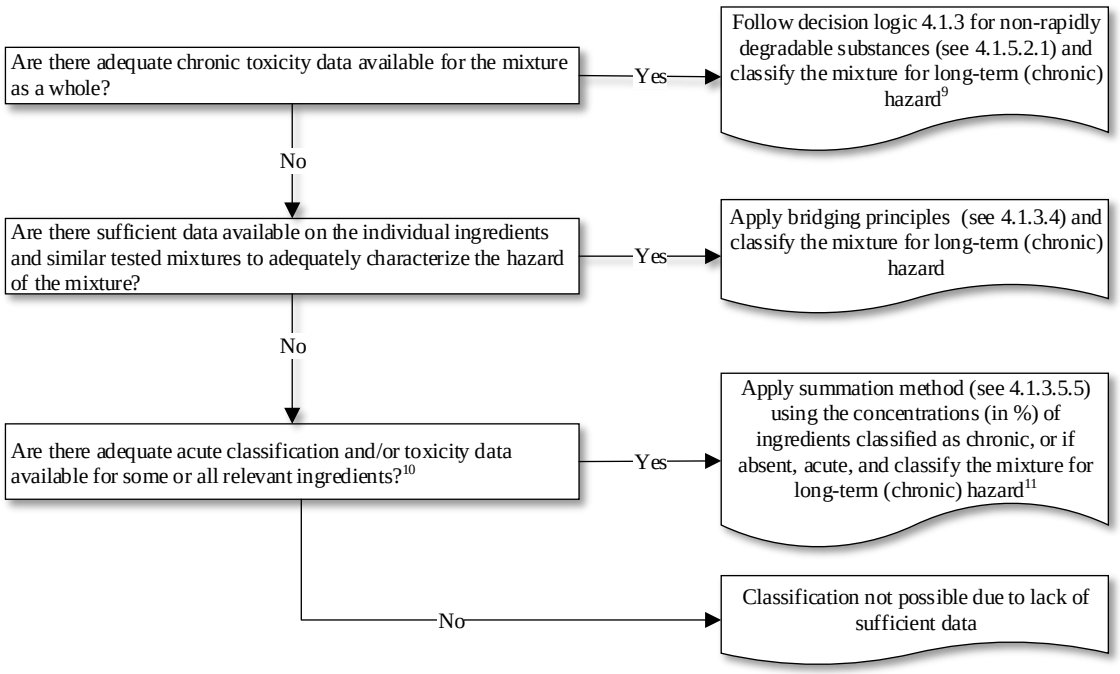
Decision logic 4.1.3 (b)

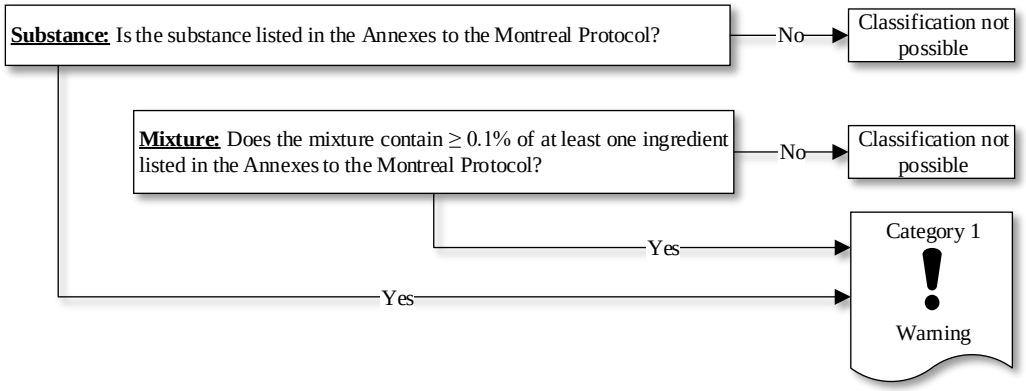


Decision logic 4.1.3 (c)



Decision logic 4.1.4



Chapter 4.2: Hazardous to the ozone layer

Decision logic 4.2.1