## **HS623**

## **Compatibility Matrix for Dangerous Goods**



This Appendix may be used for guidance as to compatibility between the different classes of dangerous goods (DGs), in the absence of more detailed compatibility information about specific products, which is available from the SDS.

Ref: WorkCover Code of Practice: The Storage and Handling of Dangerous Goods.

CLASS	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
2.1 Flammable Gas	Α	Е	С	В	В	D	В	D	D	С	В	В
2.2 Non-flammable Non-toxic Gas	E	Α	В	E	E	E	E	В	E	В	В	В
2.3 Toxic Gas	С	В	Α	С	С	С	С	С	С	В	В	В
3 Flammable Liquid (incl combustibles)	В	E	С	Α	В	D	В	D	D	С	В	В
4.1 Flammable Solid	В	E	С	В	Α	D	В	D	D	С	В	В
4.2 Spontaneously Combustible	D	E	С	D	D	Α	В	D	D	С	В	В
4.3 Dangerous When Wet	В	E	С	В	В	В	Α	D	D	С	D	В
5.1 Oxidizing Agent	D	В	С	D	D	D	D	Α	D	F	D	F
5.2 Organic Peroxide	D	E	С	D	D	D	D	D	G	F	D	F
6.1 Toxic	С	В	В	С	С	С	С	F	F	Α	В	В
8 Corrosive	В	В	В	В	В	В	D	D	D	В	G	В
9 Miscellaneous DG's	В	В	В	В	В	В	В	F	F	В	В	A

Letters A–G have the following meanings:

- **A.** Most dangerous goods of the same Class have similar primary hazards and are usually considered to be compatible.
- **B.** With a few exceptions which should be indicated on the SDS, goods of these two classes are usually non-reactive with each other. However, in an emergency such as a spill, leak or fire, the presence of the second Class may lead to different hazards or increased risk such that additional control measures are required.
- **C. –** While goods of these two classes are usually non-reactive with each other, a fire involving the fire risk goods may lead to the release of large clouds of toxic gases or vapours.
- **D.** Goods of these two classes are likely to interact with each other in such a way as to significantly increase risk. In some cases, interaction may result in fire or evolution of toxic vapours. For those that do not interact, a fire involving one may be violently accelerated by the presence of the other. These classes should not be kept in the same area unless it can be demonstrated that the risks are fully controlled.
- E. D, if the Class 2.2 has a Subsidiary Risk 5.1. -B, otherwise.
- F. D, if the Class 6.1 or 9 is a fire risk substance. -B, otherwise.
- G. D, if one material is a concentrated, strong acid and the other is a concentrated, strong alkali. –A, otherwise.