

Dangerous Goods





Class 5: Oxidising substances and organic peroxides

Risks















Which cargoes fall under this Class?

Label	Class 5 division	Examples
OXIDISING AGENT 5.1	Class 5.1 Oxidising substances – not combustible but may emit oxygen and cause or contribute to combustion of nearby cargoes and materials.	Hydrogen peroxide, potassium chlorate, ammonium nitrate based fertilisers, some pool cleaning chemicals.
ORGANIC PEROXIDE 5.2	Class 5.2 Organic peroxides – generate their own heat (polymerise), are thermally unstable and can be highly reactive.	Dibenzoyl peroxide, tert-butyl hydroperoxide.
5.2		

Some Class 5.2 products may have a self accelerating decomposition temperature (SADT). These products may require temperature controlled transport such as insulated or refrigerated vehicles.

The table here highlights key takeaways for Class 5 cargoes.

Packing

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DON'T...

- Use only approved packaging for Class 5 cargoes
- Use damaged packaging or containers
- Repackage Class 5 cargoes without specialist advice

Storing

DO....



DON'T...

- Store in well-ventilated and, where required, temperature-controlled storage facilities
- Store with labels forward, heavy cargo at bottom, and correct orientation (arrows up)
- Inspect stored cargoes regularly to ensure condition remains stable and safe
- Alert the dangerous goods competent person immediately if any problems
- Ensure all employees are trained in emergency response procedures

- Store near to stairways and emergency exits
- Store near to sources of heat, such as a radiator
- Store near to sources of ignition, such as electrical equipment
- Store near other cargoes that may react with it, especially Class 1 explosives, Class 3 flammable liquids and Class 8 corrosives
- Store old or uncollected cargoes, which can become more unstable over time

Transporting

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DON'T...

- Ensure all relevant transport risk assessments are up to date
- Ensure all staff involved in transport have the relevant dangerous goods awareness training
- Contact the DG competent person if you have any questions or queries about transport
- Pack cargoes securely to avoid movement during transport
- Familiarise yourself with and adhere to the relevant chapters of the CTU Code

- Allow any ignition sources near cargoes during transport
- Mix Class 5 cargoes with any other transported cargoes that may react with them
- Transport large quantities of Class 5.1 cargoes if classed as 'high consequence' without a security plan in place
- Assume segregation requirements for all transport modes are the same

Remember

ALWAYS...



- Communicate clearly with the entire supply chain
- Maintain a documented emergency response plan that is regularly tested and, ideally, developed in collaboration with the cargo manufacturer

NEVER...

- Expose Class 5 cargoes to temperature deviations
- Throw, drop, roll, slide or drag Class 5 cargoes at any point in the supply chain
- Ignore abandoned cargo it must be safely removed and disposed of





For more information