



Safety Bulletin

Forklift Use in Hazardous Areas

Forklift operators encounter multiple hazards each time they operate a forklift. They must identify and safely negotiate each hazard. Many workplace environments however, contain one or multiple areas that are permanently hazardous. In these areas, only modified forklifts can be used and certain regulations must be followed.

Australian Standard AS 2359.12 –Powered industrial trucks: hazardous areas, defines hazardous areas as “*areas that may be hazardous because of the presence of an explosive gas/vapour atmosphere or combustible dusts.*” AS2359.12 classifies hazardous areas in two groups. The first, known as Class I, is made up of flammable gases, vapours and liquids. The second group, consisting of combustible dusts, is known as Class II.

Modified forklifts that can operate in these areas are more commonly known as flameproof forklifts. AS2359.12 lists 26 relevant specific requirements of a flameproof vehicle. Depending on its classification, the vehicle may need to comply with one or more of these requirements, as illustrated in Table 1. For a full list of the relevant specific requirements, refer to Australian Standard AS 2359.12.

Classification of the hazardous area		Traction power source of the vehicle	Applicable specific requirements, if any	
Class I Explosive gas/vapour atmosphere as classified by AS2430.1 and AS 2430.3	Zone 0	All types	Use prohibited	
		Spark ignition	Use prohibited	
	Zone 1	Compression ignition	2 to 26	
		Electric	1 to 9	
		Zone 2	Spark ignition	Use prohibited
			Compression ignition	2 to 9, 11, 14 to 26
Class II Combustible dusts as classified by AS 2430.2	Electric	1 to 9		
	Spark ignition	Use prohibited		
	Compression ignition	2 to 9, 12 to 26		
	Electric	1 to 9		

Flameproof forklifts must be clearly marked, as per *Requirement 6* of AS 2359.12. Requirement 6 states: “*Vehicles shall be permanently and clearly marked with a minimum of one label indicating the hazardous areas in which operation is permitted.*”

Operating flameproof forklifts in hazardous areas can be extremely dangerous. Operation, modifications, maintenance, and repairs must be fully compliant with Australian Standard AS 2359.12 –Powered industrial trucks: hazardous areas. Failure to do so is not only illegal, but may lead to serious consequences.

MLA Holdings has provided flameproof forklifts for use in hazardous areas to many of its clients. Information for this article was sourced from **AS 2359.12 –Powered industrial trucks: hazardous areas**. For more forklift safety information contact MLA Holdings on 131 652 or visit www.mlaholdings.com.au.