

Information for Alarm Levels for IGD Fixed Gas Detection Systems

Gas Type	Chemical Formula	First Alarm Level	Second Alarm Level	Third Alarm Level (Optional)	Standard Range
Flammable	CxHx	10% LEL	20% LEL	40% LEL	0-100% LEL
Oxygen	O2	19.5% Vol	18.5% VOL	23% VOL	0-25% VOL
Carbon Monoxide*	CO	20ppm	55ppm	75ppm	0-100ppm
Hydrogen Sulphide	H2S	5ppm	10ppm	Optional	0-50ppm
Sulphur Dioxide*	SO2	0.5ppm	1ppm	Optional	0-5ppm
Chlorine	CL/CL2	0.2ppm	0.5ppm	Optional	0-5ppm
Nitrogen Dioxide*	NO2	0.5ppm	1ppm	Optional	0-5ppm
Nitric Oxide *	NO	2ppm	2.5ppm	Optional	0-25ppm
Nitrous Oxide*	N2O	100ppm	200ppm	Optional	0-1000ppm
Hydrogen Cyanide*	HCN	0.9ppm	4.5ppm	Optional	0-10ppm
Ammonia	NH3	25ppm	35ppm	Optional	0-100ppm
Hydrogen Chloride	HCL	1ppm	5ppm	Optional	0-10ppm
Ozone	O3	0.1ppm	0.2ppm	Optional	0-5ppm
Carbon Dioxide	CO2	3500ppm	4500ppm	Optional	0-5000ppm
Carbon Dioxide	CO2	0.5%VOL	1.5%VOL	Optional	0-5%VOL
Formaldehyde	CH2O	1ppm	2ppm	Optional	0-5ppm
Boron Trichloride*	BCL3	0.5ppm	1ppm	Optional	0-10ppm
Ethylene Oxide*	C2H4O	5ppm	10ppm	Optional	0-10ppm
Hydrogen Fluoride	HF	1ppm	3ppm	Optional	0-10ppm
Hydrogen	H2	500ppm	1000ppm	Optional	0-1000ppm
Silane	SiH4	0.5ppm	1ppm	Optional	0-10ppm
Volatile Organic Compounds	VOC	See PID Manual			

Note Oxygen enrichment is also a hazard with a normal alarm point at 23% VV

Note these alarm levels are used where clients do not request their own preferred alarm levels when commissioning systems. These are in accordance to DSEAR, HSE EH 40 and MSDS datasheets

* New alarm levels as of January 2019, in accordance to EH 40. The above alarm levels are standard alarm levels when a cause and effect is not given.

Document Ref: OIGD193 V6



Tel: +44 (0)161 483 1415
 Fax: +44 (0) 161 484 2345
 Email: sales@internationalgasdetectors.com
 Website: www.internationalgasdetectors.com

