




















BORDERLINE LIST - ATEX PRODUCTS

The List has been confirmed during the Directive 94/9/EC ATEX Working Group meeting on 12 July 2012

Note that the list is not complete, it only clarifies some common inquires and provide examples of products within or outside the scope of the ATEX Directive 94/9/EC. The List does not replace the vital risk assessment of each product and in addition ignition sources and explosion hazards related to the use of all the products shall also always be considered.

| Products | Scope of 94/9/EC (El. = Electrical) | Examples of products | Comments |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment | | | |
| Automatic lubrication systems | Yes (El.) | | Yes: if it is a battery supplied system and has one or more electrical battery cells above the values specified in Simple Apparatus clause of EN 60079-11 and if the other criteria for simple apparatus are not met. |
| Clockworks | - | | See 5.2.1 in ATEX Guidelines ("Simple" products). |
| Computers | Yes (El.) | | |
| Simple earthing clamps with and without cord | No |  | "Simple Earth Clamps" are clamps with a single earth connection. The clamp shall provide evidence that it is actually making contact. No own source of ignition, and for additional considerations, See note 2. |
| Complex earthing clamps with and without cord | Yes (El.) | | The clamp shall provide evidence that it is actually making contact. Potential ignition sources cannot be excluded according to the ignition hazard assessment. |
| Electrical motors | Yes (El.) | | El. equipment with potential ignition sources like heat and sparks of electrical origin (e.g. windings, connections) and mechanical origin (e.g. bearings). |
| Electrical pump with integrated electrical motor (e.g. canned or split tube motor pump, petrol pump/dispensers for petrol filling) | Yes (El.) |  | El. equipment with potential ignition sources like heat and sparks of electrical origin (e.g. motor circuit) and mechanical origin (e.g. pump impeller). Static discharge may occur while pumping/filling in progress. |
| Electrical fan with integrated electrical motor (e.g. electrical axial fan) | Yes (El.) | | El. equipment with potential ignition sources like heat and sparks of electrical origin (e.g. motor circuit) and mechanical origin (e.g. fan blades). |
| Non-electrical fan with integrated air motor (e.g. non-electrical axial fan) | Yes (Non El.) |  | Non-el. equipment with potential ignition sources like frictional heat and sparks of mechanical origin (e.g. bearings, fan blades). |
| Hand operated valves | No | | See 5.2.1 in ATEX-Guidelines ("Simple" products). |
| Heating cables | Yes (El.) |  | Heating cables transform electricity into heat while cables "only" transports electricity. Heating cables may also be components, e.g. heating cables for controlled design applications as part of trace heating systems. |
| Mechanical brakes | Yes (Non El.) | | Non-el. equipment with potential ignition sources like frictional heat of mechanical origin. |
| Mechanical gears | Yes (Non El.) | | Non-el. equipment with potential ignition sources like frictional heat and sparks of mechanical origin. |
| Phones and similar equipment e.g. walkie-talkies, head phones etc. | Yes (El.) | | El. equipment with potential ignition sources like heat and sparks of electrical origin. |
| Plugs and socket outlets | Yes (El.) | | El. equipment with potential ignition sources like sparks of electrical origin (e.g. when connected or disconnected). Note that all countries have special requirements on plugs and socket outlets for domestic use. |

| Products | Scope of 94/9/EC (El. = Electrical) | Examples of products | Comments |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rotary valve | Yes (Non El.) |  | Only intended to be used as dosing equipment and NOT to stop the propagation of an explosion as explosion isolation system. Has to be explosion protected with respects to its ignition sources. |
| Switches for fixed electrical installations | Yes (El.) |  | El. equipment with potential ignition sources like sparks of electrical origin (e.g. when switched on or off). |
| Torch | Yes (El.) |  | El. equipment with potential ignition sources like heat and sparks of electrical origin (e.g. sparks from a switch or heat in a bulb or battery). |
| Protective Systems | | | |
| Fire extinguisher | No |  | Intended to be used after an explosion. |
| Flame arrestors | Yes | | Intended to be used to stop the propagation of an explosion. Flame arrestors are used for example on vapour recovery lines on petrol stations to prevent the propagation of an explosion to the underground storage tank or the vehicle. |
| PT 100 sensor | No / Yes |  | <u>No</u> when used in an intrinsic safe system together with e.g. a barrier. <u>In all other situations is it to be decided on a case by case assessment.</u> |
| Rotary valve | Yes |  | Intended to be used not only as dosing equipment but also as explosion isolation system to stop the propagation of an explosion. Has to be explosion protected with respects to its ignition sources and shall fulfil the requirements for protective systems with respect to propagation of an explosion. |
| Vent panels (for explosion pressure relief) | Yes | | Intended to be used to limit the effects of an explosion. |
| Ex Components | | | |
| Empty enclosures | Yes (El.) | | Intended to be used for electrical equipment with potential ignition sources. |
| Sight glasses | No |  | No own source of ignition. However, sight glasses may form part of the enclosure of Ex equipment and be required to fulfil relevant requirements such as for a window in Ex d equipment or impact resistance in Ex o and Ex 'k' equipment. |
| Spark arrestor | Yes | | Intended to prevent an explosion; not to limit it. It is an ATEX component if intended to be built into ATEX equipment or protective systems. |
| Magnetic catches for doors etc. | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. |
| Safety, Controlling or Regulating devices | | | |
| Devices controlling the regular safety limits of an industrial process handling flammables, like pressure, level and temperature transmitters | No |  | Shall be protected as potential ignition sources themselves if placed inside hazards areas, but safety devices with respect to risks other than ignition hazards + monitoring devices providing only an alarm signal, but without direct control function, are outside scope of the directive (with respect to reliability and functional requirements according to the ESHR, clauses 1.5. and 1.6.). |
| Overload or temperature protective devices, inhibiting ignition sources from becoming active (e.g. current-dependent device for Exe motor) + Initiator devices for explosion protective equipment systems, i.e. suppression systems (trigging) | Yes (El.) | | Both categories of devices are within 94/9/EC article 1.2., with respect to functional and reliability requirements according to the ESHR, clauses 1.5. and 1.6. |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other products | | | |
| Cables | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. |
| Cable ladder and chain/handler systems | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. No own source of ignition, and for additional considerations, see Note 2. |
| Conduits/pipes: e.g. Fume extraction arms and conduits for electrical installations (Except for conduits intended to be used between the flameproof enclosures and the conduit sealing devices) | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. |
| Cable lugs/shoes with and without cord | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. |
| Electro Static Discharge (ESD) - Protections: E.g. wrestles, shoes, standing mats, antistatic bags | No |  | No autonomous function; not essential to safe functioning of ATEX equipment or protective system. |
| Doors | No | | No: none automatic doors are considered as a part of the fixed walls and are not operated in the presence of explosive atmospheres. For additional considerations, see Note 2. |
| Ladders, irrespective of the material | No | | No own source of ignition. |
| Paint | No | | No own source of ignition. |
| Tank | No | | No own source of ignition. |
| Tools: e.g. hammers, tongs | No |  | No own source of ignition. |

Note 1: Additional information can be obtained in the ATEX Guidelines and Standing Committee Considerations to Directive 94/9/EC but also in the Non-binding Guide to Directive 1999/92/EC.

Note 2: Equipment, protective systems, Ex components, safety, controlling, regulating devices and/or other products indicated as not falling within the scope of ATEX 94/9/EC, ignition sources and explosion hazards related to the use shall be considered. Friction impacts and abrasion processes involving rust and light metals (e.g. aluminium and magnesium) and their alloys may initiate an aluminothermic (thermite) reaction, which can give rise to particularly incandive sparking.