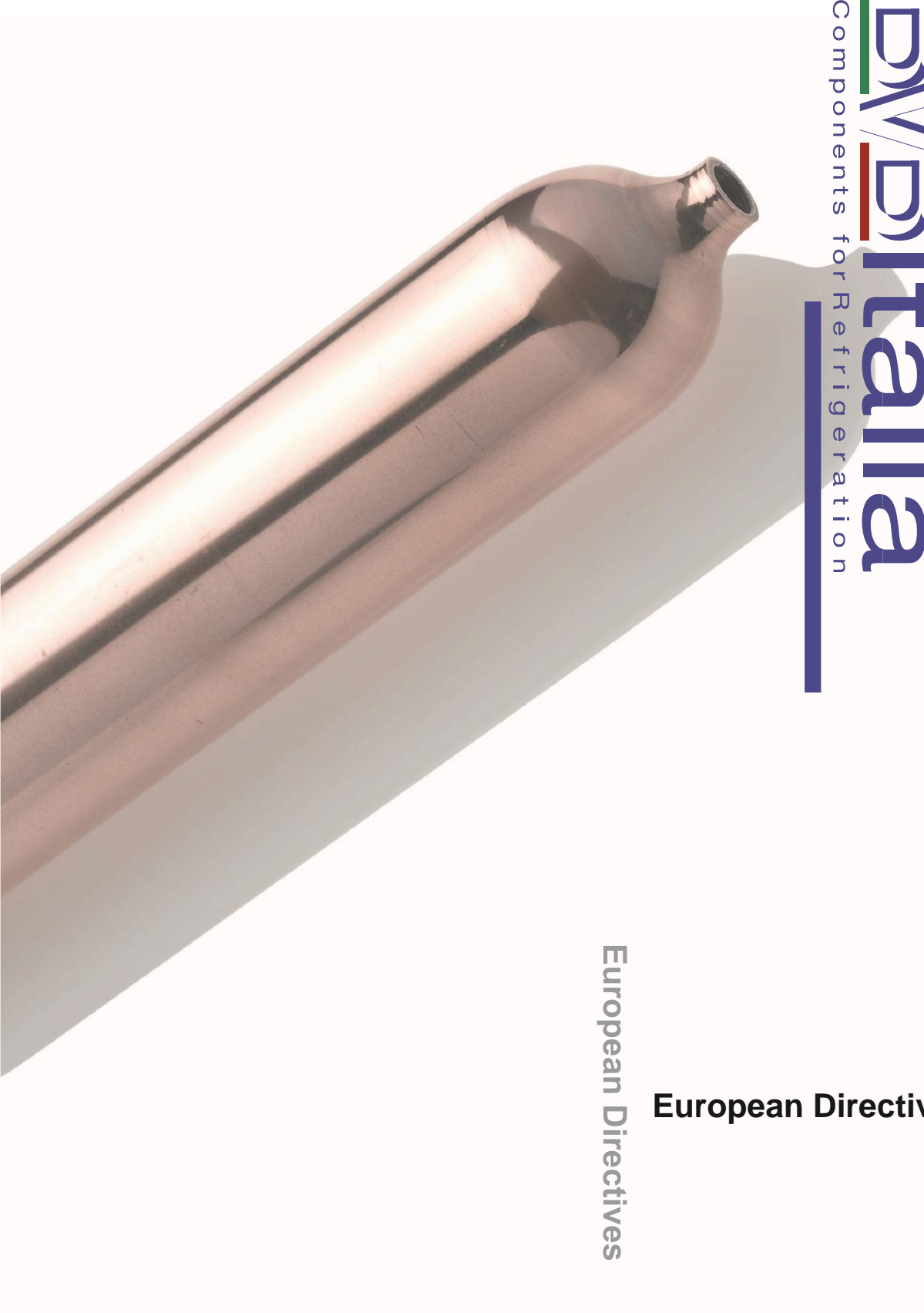


# BV Italia

Components for Refrigeration



**European Directives**

European Directives

## **FIELD OF APPLICATION IN ACCORDANCE WITH EUROPEAN DIRECTIVES APPLICATION DIRECTIVE 2011/65/UE OF THE EUROPEAN PARLIAMENT ON THE RESTRICTION OF USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT**

The Directive, better known as RoHS Directive 2 or RoHS-recast (Restriction of Hazardous Substances), aims to prohibit or restrict the use of certain hazardous substances in electrical and electronic equipment and to monitor the recovery and ecologically correct disposal of their waste. The provisions of the RoHS 2 find application in EEE (Electrical and Electronic Equipment) which falls under the categories 1,2,3,4,5,6,7,10 and 11 – all listed in Annex 1 of the same directive. The equipment belonging to Category 1 – ‘Large appliances’ and 1.10 ‘Vending Machines’ are detailed in Annex 2, in which there are, amongst other things:

- Large refrigeration equipment
- Freezers
- Refrigerators
- Equipment for packaging
- Distributors of hot and cold drinks, bottles and cans
- Large appliances for the refrigeration, conservation and the deposit of food.
- Equipment for ventilation and extraction of air and air-conditioning.

Article 4 of the RoHS 2 stipulates that the EEE placed onto the market, does not contain any of the substances listed in Annex 2 and those are:

- |                                 |         |
|---------------------------------|---------|
| · Lead                          | (0.1%)  |
| · Mercury                       | (0.1%)  |
| · Cadmium                       | (0.01%) |
| · Hexavalent Chromium           | (0.1%)  |
| · Polybrominated biphenyls      | (0.1%)  |
| · Polybrominated diphenyl ether | (0.1%)  |

Annex 3 provides various exemptions on restrictions on the use indicated in Article 4, some of which are of particular interest to the refrigeration industry:

- Lead as an alloying element in steel containing up to 0.35% lead by weight, aluminium containing up to 0.4% lead by weight and copper alloys containing up to 4% lead by weight.
- Hexavalent Chromium as an anti corrosion agent in cooling systems of carbon steel in absorption refrigerators.

**GS S.r.l.**, in conjunction with their suppliers, has initiated a careful investigation in order to identify the presence or absence of the dangerous substances mentioned above both in the products themselves and in their production processes.

At the end of this process, which began with the transposition of the Directive by the Italian State (Decree no.93 of 25/02/2000), **GS S.r.l.** is able to declare that all the products that it supplies to its customers, are in accordance with the restrictions of the use of certain dangerous substances as defined in Directive 2001/65/UE.

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Specifically, the products of **GS S.r.l.:**

1. Do not contain mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ether.
2. Contain lead as an alloying element in steel, in the aluminium and copper alloys within the limits of acceptability provided in Annex 3 of the RoHS Directive 2.

**GS S.r.l.** also informs that all products supplied to its customers as components used in EEE, must not:

- Be CE marked as required in Article 15 of the Directive 2011/65/UE
- Be accompanied by a declaration of conformity according to Annex 6 of the Directive

## **APPLICATION OF THE REGULATION 1907/2006/CE OF THE EUROPEAN PARLIAMENT CONCERNING THE REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICAL SUBSTANCES**

The European regulation 1907/2006/CE, better known by the acronym REACH (Registration, Evaluation, Authorisation of Chemicals), sets out the mandatory nature of the registration, evaluation, authorization and restriction of chemicals.

This regulation requires pre-registration and registration of chemical substances produced in or imported into Europe at the European agency for chemical substances. (European Chemicals Agency – ECHA).

**GS S.r.l.**, in accordance with the REACH regulations from its entry into force on the 1st June, 2007, introduced a series of in depth checks into the content and purpose of the new legislation with the purpose of defining specific roles in the supply chain and any obligations which it would have to fulfill.

Because **GS S.r.l.** is not a ‘manufacturer’ or an ‘importer’ of chemicals, it is not required to comply with the obligations of pre-registration and/or registration.

Moreover, not being a ‘manufacturer’ or an ‘importer’ of chemical preparations, it is not obliged to give information to its customers on the registration of substances contained in its products or safety information.

Finally, **GS S.r.l.**, not being a ‘manufacturer’ or an ‘importer’ of articles that release substances under normal or reasonably foreseeable conditions of use (Art. 7.1 REACH) is not required to comply with the obligations of pre-registration and/or registration.

**GS S.r.l.**, as far as their own suppliers are concerned, as a ‘downstream user’ of preparations, substances and items used in their production processes, has instigated a specific action with all their suppliers to collect all relevant information to check:

- that they are aware of the content and the aims of the REACH regulations.
- That they are able to fulfill their obligations within the scope of their competence
- continuity of supplies for the future

**GS S.r.l.** , as a 'manufacturer' and conscious of its responsibility to its customers, is committed to constant vigilance of the points mentioned and the need to verify that its products:

- should not be used in a manner inconsistent with the restriction of substances as set out in Annex XV11 and envisaged by Article 67 of REACH.
- do not contain concentrations higher than 0.1% weight of substances of very high concern, better known by the acronym of VERY HIGH CONCERN (SVHC) (Substance of Very High Concern) listed in the Candidate List of Annex XIV and simultaneously fulfill all the conditions listed in Art./2 REACH.

In the event that such eventualities do occur, **GS S.r.l** undertake to inform all its customers in a timely manner by giving sufficient information as necessary for safe use as provided for in Art. 33 of REACH.

## APPLICATION OF THE DIRECTIVE 97/23/EC OF THE EUROPEAN PARLIAMENT IN THE FIELD OF PRESSURE EQUIPMENT

Directive 97/23/EC (PED) applies to the design, manufacture and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure 'PS' of more than 0.5 bar, with the exclusion of cases listed in Art. 1 (3) of the Directive.

The PED has been adopted by the Italian Government by Legislative Decree no. 93 of the 25<sup>th</sup> February, 2000 and entered into force of the 18<sup>th</sup> April, 2000.

The following are some definitions taken from PED:

- **Pressure Equipment** : vessels, piping, safety accessories and pressure accessories.
- **Pipes**: components of pipes for the transport of fluids when connected in order to be installed into a pressure system.
- **Safety Accessories** : devices intended for protection of pressure vessels against exceeding the prescribed limits.
- **Pressure Accessories** : pressure devices having service functions whose constituent parts are subject to pressure (solenoids, valves, indicators),
- **Kits** : pressure equipment assembled by a manufacturer to establish a fully integrated and functioning system.
- **Maximum allowable pressure (PS)** : maximum pressure for which the equipment is designed and specified by the manufacturer.
- **Temperature minimum/maximum allowable (TS)**: Temperature minimum/maximum for which the equipment is designed and specified by the manufacturer.
- **Volume (V)**: internal volume of a chamber including the volume of connections to the first connection and excluding the volume of the permanent internal parts.
- **Nominal size (DN)**: numerical designation of the size which is common to all components of the piping system.
- **Fluids** : gases, liquids and vapours in their pure state and mixtures thereof.

In Art. 3 and Annex II of the Directive, all pressure equipment is classified by category of increasing risk from I to IV as a function of:

- State of fluid content
- Hazard class of the fluid contained
- Type of equipment
- Size and energy potential – V, DN,PS x V, PS x DN

and must comply with the essential safety requirements set out in Annex 1 to Directive PED.

All pressure equipment having characteristics less than or equal to the limits set out in sections 1.1, 1.2 and 1.3 and point 2 of Article 3, are not required to satisfy the essential safety requirements set out in Annex 1 but they must be designed and manufactured in accordance with good practice in use in one of the member States. Such equipment must not bear the CE mark.

Article 9 of the PED Directive classifies fluids, based on their hazard/danger level, into two groups:

- Group 1: includes dangerous fluids that are understood as the substances or preparations as defined in Article 2 of Directive 67/548/EEC of 27<sup>th</sup> June, 1967 and subsequent amendments.

The following fluids appear in Group 1:

- ❖ Explosives
- ❖ Extremely fiammable
- ❖ Highly fiammable
- ❖ Fiammable
- ❖ Highly toxic
- ❖ Combustive

- Group 2: includes all other fluids not listed in Group 1,

GS S.r.l. declares that the products listed in their catalogue are suitable for use with refrigerant fluids belonging to Group 2, all of which are listed and classified A 1 in Annex E of the specification 3768-1:2008.

It should be pointed out that in the standard mentioned, the following fluids are listed: R12; R22; R134A; R404A; R407C; R410C; R502; R507.

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