

# A BRIEF EXPLANATION OF THE ATEX DIRECTIVE

Based on

Hedson statement from September 29 2003, Author: Peter Beijbom  
Miscellaneous ATEX training material.

## GENERAL

The term “ATEX” is derived from “ATmosphères EXplosives”. The ATEX directive became mandatory July 1, 2003 and applies for ALL areas where explosive atmospheres may occur (EX-area).

This means that Bodyshops, and the equipment used in the Bodyshop, must meet the requirements in the directive.

There are two ATEX directives:

- **94/9/EC** Covers the equipment requirements for all “EX”-areas.
- **1999/92/EC** Covers the safety and protection of workers in “EX” areas.

The two directives are also known as ATEX 100a and ATEX 137 because they refer to earlier paragraphs (§100a and §137) developed by the EC.

The **94/9/EC**, “**Equipment directive**”, does not only apply to electrical equipment but also **ALL** mechanical equipment.

The **1999/92/EC**, “**Work area directive**”, describes the requirements on the company or industry where the explosive atmosphere is present or might occur. In our case inside the Bodyshop.

## AREA CLASSIFICATION

According to the **1999/92/EC** all Bodyshops must **classify the work areas, i.e. divide the areas into zones**. The areas are divided into three different zones:

- | <b>Name</b> | <b>Description</b> |
|-------------|--------------------|
|-------------|--------------------|

**Appendix 1** shows **an example** of an area classification in a Bodyshop. Please note that the area classification and the extent of a specific zone depend on the degree of surrounding ventilation.

In some cases it can be difficult to determine the type and extent of a zone. Remember that the local authorities can overrule the classification done by the responsible person of the Bodyshop.

## MACHINE CATEGORIES

According to 94/9/EC, equipment are categorised into the following categories:

**Category I**, may be used in **Zone 0**

**Category II**, may be used in **Zone 1**

**Category III**, may be used in **Zone 2**

Please note that **ALL** equipment within a classified area (zone) must be marked and meet the requirements of the directive.

**Category I** equipment must be certified and approved by a third party, for example BASEFA, TÜV or similar.

**Category II and III** can be evaluated and classified by the manufacturer.

## CE DECLARATION

Hedson started the work of adapting the Gun Cleaners to the ATEX directive already in 2001. And ever since the directive became mandatory, all Hedson Bodyshop products are marked and meet the directive to a full extent.

In the Hedson declaration of conformity Hedson declares that our spray gun cleaner for solvent, is equipment category II. This means that the Gun Cleaner may be placed in zone 1.

Please note that a spray gun cleaner using solvent creates its own EX atmosphere. With the aid of a third party (BG, Germany), a general determination of the extent of the area was determined.

This means that with little or no ventilation around the Gun Cleaner, the area should be classified as zone 1 within a radius of 1m, and zone 2 within an additional radius of 2,5m. Please note that the extent of the hazardous area (EX area) is determined by the degree of surrounding ventilation.

## HEDSON PUMP

The classification of zones can easily be subject to misinterpretations so to aliminate any doubts regarding the Hedson pump, this has been classified as category I equipment for use in zone 0. This difficult and costly process was done in cooperation with BASEFA in the UK.

## DETAILED INFORMATION

Detailed technical requirements for equipment and area classification on the EU website:

<http://ec.europa.eu/enterprise/newapproach/legislation/guide/index.htm>

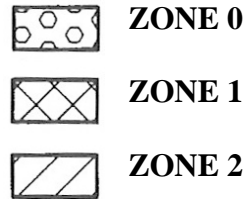


## Appendix 1

Please note that this is an example. Area classification is subject to individual judgement.

### Explanation

- A Boiler/heating room
- B Carwash/degreasing
- C Spray booth (heated)
- D Paint storage
- E Mixing room



- 1 Degreasing station
- 2 Spray Gun cleaner
- 3 Mixer
- 4 Mixing recipe
- 5 Mixing table
- 6 Solvent Recycler
- 7 Ventilated Mixing table

