

## 7.37 Vehicle refinishing

### 7.37.1 Coverage

This sector covers the coating of road vehicles, or part of them, carried out as part of vehicle repair, conservation or decoration outside manufacturing installations as considered in annexe IX.

Vehicle refinishing comprises coating and surface cleaning activities.

### 7.37.2 Emission sources

The main VOC emission sources in this sector are the application of paint, the drying operations, the cleaning of equipment, and the cleaning operations before the coating and between the applications of different layers.

### 7.37.3 Available techniques, Achievable Solvent Concentrations

Emission reduction can be achieved by primary measures such as good housekeeping, low organic solvent containing paints (including water-based systems), high-volume, low-pressure (HVLV) guns, and gun cleaning devices. Secondary measures are normally not applicable for economic and efficiency reasons.

The maximum VOC contents permitted under the Product Directive 2004/42/EC are defined by product category in table 1 below.

**Table 1: Achievable solvent concentrations for each type of paint**

Product Subcategory <sup>1</sup>	Coatings	VOC (g/l) <sup>2</sup>
Preparatory and cleaning	Preparatory	850
	Pre-cleaner	200
Bodyfiller/stopper	All types	250
Primer	Surfacer/filler and general (metal) primer	540
	Wash primer	780
Topcoat	All types	420
Special finishes	All types	840

<sup>1</sup> Product subcategories are defined in annex XI

<sup>2</sup> g/l of ready for use product. Except for "preparatory and cleaning", any water content of the product ready for use should be discounted.

### 7.37.4 Cost data for emission reduction techniques

Abatement costs corresponding to the respect of the Directive 2004/42/CE are about 1,400 €/t VOC abated. The detailed methodology used to estimate these costs is defined in the EGTEI synopsis sheet concerning "vehicle refinishing" [1].

**Caution:** this document is susceptible to evolve if new updated data are available.

### 7.37.5 Emerging techniques

Further reductions seem to be possible.

### **7.37.6 References used for chapter 7.37**

[1] EGTEI synopsis sheet: Vehicle refinishing – 2005

[2] Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in decorative paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC