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►B DIRECTIVE 2004/42/CE 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 certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC

(OJ L 143, 30.4.2004, p. 87)

Amended by:

		Official Journal		
		No	page	date
►M1	Regulation (EC) No 1137/2008 of the European Parliament and of the Council of 22 October 2008	L 311	1	21.11.2008
►M2	Directive 2008/112/EC of the European Parliament and of the Council of 16 December 2008	L 345	68	23.12.2008
►M3	Commission Directive 2010/79/EU of 19 November 2010	L 304	18	20.11.2010

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on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission,

Having regard to the Opinion of the European Economic and Social Committee ([1]),

Acting in accordance with the procedure laid down in Article 251 of the Treaty ([2]),

Whereas:

(1) Directive 2001/81/EC of the European Parliament and the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants ([3]) sets national ceilings for emissions of certain pollutants, including volatile organic compounds (hereinafter: 'VOCs'), to be attained by 2010 as part of the Community's integrated strategy to combat acidification and ground-level ozone, but does not include limit values for emissions of those pollutants from specific sources.

(2) In order to comply with the national ceiling for emissions of VOCs, Member States have to target a number of different categories of sources of these emissions.

(3) This Directive complements measures taken at national level in order to ensure compliance with the ceiling for emissions of VOCs.

(4) In the absence of Community provisions, legislation in the Member States imposing limit values for VOCs in certain categories of products might differ. Such disparities, together with the absence of such legislation in some Member States, would be liable to create unnecessary barriers to trade and distortion of competition within the internal market.

([1]) OJ C 220, 16.9.2003, p. 43.
([2]) Opinion of the European Parliament of 25 September 2003 (not yet published in the Official Journal), Council Common Position of 7 January 2004 (OJ C 79 E, 30.3.2004, p. 1), and Position of the European Parliament of 30 March 2004 (not yet published in the Official Journal).
([3]) OJ L 309, 27.11.2001, p. 22.

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(5) National laws and provisions which, for the purposes of combating ground-level ozone, establish limit values for the content of VOCs in the products covered by this Directive therefore need to be harmonised in order to ensure that they do not restrict the free movement of these products.

(6) Since the objective of the proposed action, namely reducing emissions of VOCs, cannot be sufficiently achieved by the Member States, because emissions of VOCs in one Member State affect air quality in other Member States and reductions of VOC emissions can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve this objective.

(7) The VOC content of paints, varnishes and vehicle refinishing products gives rise to significant emissions of VOCs into the air, which contribute to the local and transboundary formation of photochemical oxidants in the boundary layer of the troposphere.

(8) The VOC content of certain paints and varnishes and vehicle refinishing products should therefore be reduced as much as is technically and economically feasible taking into account climatic conditions.

(9) A high level of environmental protection requires the setting and achievement of content limit values for VOCs used in products covered by this Directive.

(10) Provision should be made for transitional measures for products produced before the requirements of this Directive come into force.

(11) Member States should be able to grant individual licences for the sale and purchase for specific purposes of products in strictly limited quantities which do not comply with the solvent limit values established by this Directive.

(12) This Directive complements Community provisions on the labelling of chemical substances and preparations.

(13) The protection of the health of consumers and/or workers and the protection of the working environment should not fall within the scope of this Directive, and measures taken by Member States for these purposes should therefore not be affected by this Directive.

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(14) Content limit values need to be monitored in order to determine whether the mass concentrations of VOCs found in each category of paints, varnishes and vehicle refinishing products covered by this Directive are within the permitted limits.

(15) As the VOC content of products used for certain vehicle refinishing activities are now regulated under this Directive, Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations [1] should be amended accordingly.

(16) Member States should, nevertheless, be able to maintain or introduce national measures for the control of emissions from vehicle refinishing activities involving the coating of road vehicles as defined in Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers [2], or part of them, carried out as part of vehicle repair, conservation or decoration outside of manufacturing installations.

(17) This Directive should not apply to products sold for exclusive use in installations authorised according to Directive 1999/13/EC where emission limiting measures provide alternative means of achieving at least equivalent VOC emission reductions.

(18) The Member States should lay down rules on penalties applicable to infringements of the provisions of this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

(19) Member States should report to the Commission on the experience gained in the application of this Directive.

(20) A review should be made both of the scope for reducing the VOC content of products outside the scope of this Directive and the possibility of further reducing the VOC limit values already provided for.

(21) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission [3],

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[1] OJ L 85, 29.3.1999, p. 1. Directive as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

[2] OJ L 42, 23.2.1970, p. 1. Directive as last amended by Directive 2004/3/EC of the European Parliament and of the Council (OJ L 49, 19.2.2004, p. 36).

[3] OJ L 184, 17.7.1999, p. 23.

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HAVE ADOPTED THIS DIRECTIVE:

Article 1

Purpose and scope

1. The purpose of this Directive is to limit the total content of VOCs in certain paints and varnishes and vehicle refinishing products in order to prevent or reduce air pollution resulting from the contribution of VOCs to the formation of tropospheric ozone.

2. To achieve the objective set out in paragraph 1, this Directive approximates the technical specifications for certain paints and varnishes and vehicle refinishing products.

3. This Directive shall apply to the products set out in Annex I.

4. This Directive does not prejudice or affect measures, including labelling requirements, taken at Community or national level to protect the health of consumers and of workers and their working environment.

Article 2

Definitions

For the purposes of this Directive, the following definitions shall apply:

1. ‘Competent authority’ means the authority or authorities or bodies responsible under the legal provisions of the Member States for carrying out the obligations arising from this Directive;

2. ‘Substances’ means any chemical element and its compounds, as they occur in the natural state or as produced by industry, whether in solid or liquid or gaseous form;

3. ►**M2** ‘Mixture’ ◄ means mixtures or solutions composed of two or more substances;

4. ‘Organic compound’ means any compound containing at least the element carbon and one or more of hydrogen, oxygen, sulphur, phosphorus, silicon, nitrogen, or a halogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates;

5. ‘Volatile organic compound (VOC)’ means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa;

6. ‘VOC content’ means the mass of volatile organic compounds, expressed in grams/litre (g/l), in the formulation of the product in its ready to use condition. The mass of volatile organic compounds in a given product which react chemically during drying to form part of the coating shall not be considered part of the VOC content;

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7. ‘Organic solvent’ means any VOC which is used alone or in combination with other agents to dissolve or dilute raw materials, products, or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or as a plasticiser, or as a preservative;

8. ‘Coating’ means any ►M2 mixture ◄, including all the organic solvents or ►M2 mixture ◄ containing organic solvents necessary for its proper application, which is used to provide a film with decorative, protective or other functional effect on a surface;

9. ‘Film’ means a continuous layer resulting from the application of one or more coats to a substrate;

10. ‘Water-borne coatings (WB)’ means coatings the viscosity of which is adjusted by the use of water;

11. ‘Solvent-borne coatings (SB)’ means coatings the viscosity of which is adjusted by the use of organic solvent;

12. ‘Placing on the market’ means making available to third parties, whether in exchange for payment or not. Importation into the Community customs territory shall be deemed to be placing on the market for the purposes of this Directive.

Article 3

Requirements

1. Member States shall ensure that the products set out in Annex I are placed on the market within their territory after the dates laid down in Annex II only if they have a VOC content not exceeding the limit values set out in Annex II and comply with Article 4.

For determining compliance with the VOC content limit values set out in Annex II, the analytical methods referred to in Annex III shall be used.

For products set out in Annex I to which solvents or other components containing solvents have to be added in order for the product to be ready for use, the limit values in Annex II shall apply to the VOC content of the product in its ready for use condition.

2. By way of derogation from paragraph 1, Member States shall exempt from compliance with the above requirements products sold for exclusive use in an activity covered by Directive 1999/13/EC and carried out in a registered or authorised installation according to Articles 3 and 4 of that Directive.

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3. For the purposes of restoration and maintenance of buildings and vintage vehicles designated by competent authorities as being of particular historical and cultural value, Member States may grant individual licences for the sale and purchase in strictly limited quantities of products which do not meet the VOC limit values laid down in Annex II.

4. Products falling under the scope of this Directive which are shown to be produced before the dates laid down in Annex II and do not fulfil the requirements of paragraph 1 may be placed on the market for a period of 12 months following the date on which the requirement applying to the product in question comes into force.

Article 4

Labelling

Member States shall ensure that the products set out in Annex I carry a label when they are placed on the market. The label shall indicate:

(a) the subcategory of the product and the relevant VOC limit values in g/l as referred to in Annex II;

(b) the maximum content of VOC in g/l of the product in a ready to use condition.

Article 5

Competent authority

Member States shall designate a competent authority responsible for fulfilling the obligations laid down in this Directive, and shall inform the Commission thereof not later than 30 April 2005.

Article 6

Monitoring

Member States shall set up a monitoring programme for the purpose of verifying compliance with this Directive.

Article 7

Reporting

Member States shall report the results of the monitoring programme to demonstrate compliance with the Directive and the categories and quantities of products licensed according to Article 3(3). The first two reports shall be submitted to the Commission 18 months after the dates for compliance with the VOC content limit values laid down in Annex II; subsequently a report shall be submitted every five years. The Commission shall develop in advance a common format for the submission of monitoring data in accordance with the procedure referred to in Article 12(2). Annual data shall be made available to the Commission upon request.

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Article 8

Free circulation

Member States shall not, on the grounds dealt with in this Directive, prohibit, restrict or prevent the placing on the market of products falling under the scope of this Directive which, in their ready for use condition, comply with the requirements of this Directive.

Article 9

Review

The Commission is invited to submit to the European Parliament and the Council:

1. by 2008 at the latest, a report based on the results of the review referred to in Article 10 of Directive 2001/81/EC. This report shall examine:

   (a) the broad scope and potential for making reductions in the VOC content of products outside the scope of this Directive including aerosols for paints and varnishes;

   (b) the possible introduction of a further (phase II) reduction in the VOC content of vehicle refinishing products;

   (c) any new element relating to the socio-economic impact of the application of phase II as foreseen for paints and varnishes;

2. at the latest 30 months after the date of implementation of the VOC content limit values of Annex II phase II, a report taking account, in particular, of the reports referred to in Article 7 and of any technological developments in the manufacture of paints, varnishes and vehicle refinishing products. This report shall examine the broad scope and potential for making further reductions in VOC content of products inside the scope of this Directive, including the possible distinction between paints used for interiors and exteriors in subcategories (d) and (e) of Annex I, point 1.1. and Annex II, section A.

These reports shall be accompanied, if appropriate, by proposals to amend this Directive.

Article 10

Penalties

Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take the necessary measures to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify those rules and measures to the Commission by 30 October 2005 at the latest, and shall notify it without delay of any subsequent amendment affecting them.

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Article 11

Adaptation to technical progress

The Commission shall adapt Annex III to take account of technical progress. Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 12(3).

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Article 12

Committee

1. The Commission shall be assisted by the committee established by Article 13 of Council Directive 1999/13/EC, hereinafter referred to as 'the Committee'.

2. Where reference is made to this paragraph Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

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3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 13

Amendment of Directive 1999/13/EC

1. Directive 1999/13/EC is hereby amended as follows:

in Annex I, in the section entitled 'Vehicle refinishing', the following indent shall be deleted:

'— the coating of road vehicles as defined in Directive 70/156/EEC, or part of them, carried out as part of vehicle repair, conservation or decoration outside of manufacturing installations, or'.

2. Notwithstanding paragraph 1, Member States may maintain or introduce national measures for the control of emissions from vehicle-refinishing activities deleted from the scope of Directive 1999/-13/EC.

Article 14

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 30 October 2005 at the latest, and shall immediately inform the Commission thereof.

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When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive, together with a table showing how the provisions of this Directive correspond to the national provisions adopted.

Article 15

Entry into force of the Directive

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 16

Addressees

This Directive is addressed to the Member States.

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ANNEX I

SCOPE

1. For the purposes of this Directive, paints and varnishes means products listed in the subcategories below, excluding aerosols. They are coatings applied to buildings, their trim and fittings, and associated structures for decorative, functional and protective purpose.

1.1. Subcategories:

a) ‘matt coatings for interior walls and ceilings’ means coatings designed for application to indoor walls and ceilings with a degree of gloss ≤ 25@60°.

b) ‘glossy coatings for interior walls and ceilings’ means coatings designed for application to indoor walls and ceilings with a degree of gloss > 25@60°.

c) ‘coatings for exterior walls of mineral substrate’ means coatings designed for application to outdoor walls of masonry, brick or stucco;

d) ‘interior/exterior trim and cladding paints for wood, metal or plastic’ means coatings designed for application to trim and cladding which produce an opaque film. These coatings are designed for either a wood, metal or a plastic substrate. This subcategory includes undercoats and intermediate coatings;

e) ‘interior/exterior trim varnishes and woodstains’ means coatings designed for application to trim which produce a transparent or semi-transparent film for decoration and protection of wood, metal and plastics. This subcategory includes opaque woodstains. Opaque woodstains means coatings producing an opaque film for the decoration and protection of wood, against weathering, as defined in EN 927-1, within the semi-stable category;

f) ‘minimal build woodstains’ means woodstains which, in accordance with EN 927-1:1996, have a mean thickness of less than 5µm when tested according to ISO 2808: 1997, method 5A;

g) ‘primers’ means coatings with sealing and/or blocking properties designed for use on wood or walls and ceilings;

h) ‘binding primers’ means coatings designed to stabilise loose substrate particles or impart hydrophobic properties and/or to protect wood against blue stain;

i) ‘one-pack performance coatings’ means performance coatings based on film-forming material. They are designed for applications requiring a special performance, such as primer and topcoats for plastics, primer coat for ferrous substrates, primer coat for reactive metals such as zinc and aluminium, anticorrosion finishes, floor coatings, including for wood and cement floors, graffiti resistance, flame retardant, and hygiene standards in the food or drink industry or health services;

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j) ‘two-pack performance coatings’ means coatings with the same use as one-performance coatings, but with a second component (e.g. tertiary amines) added prior to application;

k) ‘multicoloured coatings’ means coatings designed to give a two-tone or multiple-colour effect, directly from the primary application;

l) ‘decorative effect coatings’ means coatings designed to give special aesthetic effects over specially prepared pre-painted substrates or base coats and subsequently treated with various tools during the drying period.

2. For the purposes of this Directive, ‘vehicle refinishing products’ means products listed in the subcategories below. They are used for the coating of road vehicles as defined in Directive 70/156/EEC, or part of them, carried out as part of vehicle repair, conservation or decoration outside of manufacturing installations.

2.1. Subcategories:

a) ‘preparatory and cleaning’ means products designed to remove old coatings and rust, either mechanically or chemically, or to provide a key for new coatings:

(i) preparatory products include gunwash (a product designed for cleaning spray-guns and other equipment), paint strippers, degreasers (including anti-static types for plastic) and silicone removers;

(ii) ‘precleaner’ means a cleaning product designed for the removal of surface contamination during preparation for and prior to the application of coating materials;

b) ‘Bodyfiller/stopper’ means heavy-bodied compounds designed to be applied to fill deep surface imperfections prior to the application of the surfacer/filler;

c) ‘primer’ means any coating that is designed for application to bare metal or existing finishes to provide corrosion protection prior to application of a primer surfacer:

(i) ‘surfacer/filler’ means a coating designed for application immediately prior to the application of topcoat for the purpose of corrosion resistance, to ensure adhesion of the topcoat, and to promote the formation of a uniform surface finish by filling in minor surface imperfections;

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(ii) ‘general metal primer’ means a coating designed for application as primers, such as adhesion promoters, sealers, surfacers, undercoats, plastic primers, wet-on-wet, non-sand fillers and spray fillers;

(iii) ‘wash primer’ means coatings containing at least 0,5 % by weight of phosphoric acid designed to be applied directly to bare metal surfaces to provide corrosion resistance and adhesion; coatings used as weldable primers; and mordant solutions for galvanised and zinc surfaces;

d) ‘topcoat’ means any pigmented coating that is designed to be applied either as a single-layer or as a multiple-layer base to provide gloss and durability. It includes all products involved such as base coatings and clear coatings:

(i) ‘base coatings’ means pigmented coatings designed to provide colour and any desired optical effects, but not the gloss or surface resistance of the coating system;

(ii) ‘clear coating’ means a transparent coating designed to provide the final gloss and resistance properties of the coating system;

e) ‘special finishes’ means coatings designed for application as topcoats requiring special properties, such as metallic or pearl effect, in a single layer, high-performance solid-colour and clear coats, (e.g. anti-scratch and fluorinated clear- coat), reflective base coat, texture finishes (e.g. hammer), anti-slip, under-body sealers, anti-chip coatings, interior finishes; and aerosols.

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ANNEX II

MAXIMUM VOC CONTENT LIMIT VALUES FOR PAINTS AND VARNISHES

	Product Subcategory	Type	Phase I (g/l (*)) (from 1.1.2007)	Phase II (g/l (*)) (from 1.1.2010)
a	Interior matt walls and ceilings (Gloss < 25@60°)	WB	75	30
		SB	400	30
b	Interior glossy walls and ceilings (Gloss > 25@60°)	WB	150	100
		SB	400	100
c	Exterior walls of mineral substrate	WB	75	40
		SB	450	430
d	Interior/exterior trim and cladding paints for wood and metal	WB	150	130
		SB	400	300
e	Interior/exterior trim varnishes and woodstains, including opaque woodstains	WB	150	130
		SB	500	400
f	Interior and exterior minimal build woodstains	WB	150	130
		SB	700	700
g	Primers	WB	50	30
		SB	450	350
h	Binding primers	WB	50	30
		SB	750	750
i	One-pack performance coatings	WB	140	140
		SB	600	500
j	Two-pack reactive performance coatings for specific end use such as floors	WB	140	140
		SB	550	500
k	Multi-coloured coatings	WB	150	100
		SB	400	100
l	Decorative effect coatings	WB	300	200
		SB	500	200

(*) g/l ready to use

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MAXIMUM VOC CONTENT LIMIT VALUES FOR VEHICLE REFINISHING PRODUCTS

	Product Subcategory	Coatings	VOC g/l (*) (1.1.2007)
a	Preparatory and cleaning	Preparatory	850
		Pre-cleaner	200
b	Bodyfiller/stopper	All types	250
c	Primer	Surfacer/filler and general (metal) primer	540
		Wash primer	780
d	Topcoat	All types	420
e	Special finishes	All types	840

(*) g/l of ready for use product. Except for subcategory (a) any water content of the product ready for use should be discounted.

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ANNEX III

METHODS REFERRED TO IN ARTICLE 3(1)

Permitted method for products with VOC content below 15 % by mass where reactive diluents are not present:

Parameter	Unit	Test	
		Method	Date of publication
VOC content	g/l	ISO 11890-2	2006

Permitted methods for products with VOC content equal to or greater than 15 % by mass where reactive diluents are not present:

Parameter	Unit	Test	
		Method	Date of publication
VOC content	g/l	ISO 11890-1	2007
VOC content	g/l	ISO 11890-2	2006

Permitted method for products with VOC content where reactive diluents are present:

Parameter	Unit	Test	
		Method	Date of publication
VOC content	g/l	ASTMD 2369	2003