

# PVD: Paints Directive (Directive 2004/42/EC), explained

The Paints Directive caps the volatile organic compound content of decorative paints and varnishes and vehicle refinishing products and requires a label with the subcategory, VOC limit and maximum content, binding manufacturers, importers, wholesalers and retailers. Its Phase I limits have applied since 1 January 2007 and the stricter Phase II limits for paints and varnishes since 1 January 2010.

Reviewed 24 September 2026 by Conphora compliance team · Next review 13 March 2027 · Not legal advice

## Key facts

|            |                                                                                                                                                        |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference  | Directive 2004/42/EC                                                                                                                                   | Act type     | Directive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| In force   | 30 April 2004                                                                                                                                          | Applies from | 1 January 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Amended by | Regulation (EC) No 1137/2008,<br>Directive 2008/112/EC,<br>Commission Directive 2010/79/EU,<br>Regulation (EU) 2019/1243,<br>Regulation (EU) 2019/1020 | Enforced by  | Each Member State designates a competent authority responsible for fulfilling the obligations under the directive and enforces the national law that transposes it; since 16 July 2021 the directive is point 17 of Annex I to Regulation (EU) 2019/1020, so the market surveillance powers of that regulation apply to these products, while Article 4 of that regulation, the duty to have an economic operator established in the Union, does not, because Article 4(5) does not list the directive. |

CELEX 32004L0042

## Key dates

---

|                         |                                                                                                                                                                                                                                                                                                                          |                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>30 April 2004</b>    | Directive 2004/42/EC enters into force on the day of its publication in OJ L 143 of 30 April 2004                                                                                                                                                                                                                        | Art. 15                                          |
| <b>30 April 2005</b>    | Deadline for Member States to designate the competent authority responsible for fulfilling the obligations under the directive and to inform the Commission of it                                                                                                                                                        | Art. 5                                           |
| <b>30 October 2005</b>  | Transposition deadline: Member States bring into force the laws, regulations and administrative provisions necessary to comply with the directive, and notify their rules on penalties to the Commission by the same date                                                                                                | Art. 10 and Art. 14(1)                           |
| <b>1 January 2007</b>   | Phase I maximum VOC content limit values apply to the twelve paint and varnish subcategories of Annex II section A, the single set of limit values applies to the five vehicle refinishing subcategories of Annex II section B, and the subcategory and VOC label of Article 4 becomes mandatory                         | Art. 3(1), Art. 4 and Annex II, sections A and B |
| <b>31 December 2007</b> | Last day on which products shown to have been produced before 1 January 2007 and not meeting the Phase I limits may be placed on the market, the 12-month period running from the date the requirement came into force                                                                                                   | Art. 3(4)                                        |
| <b>11 December 2008</b> | Regulation (EC) No 1137/2008 enters into force, replacing Article 11 and Article 12(3) so that Annex III is adapted to technical progress under the regulatory procedure with scrutiny                                                                                                                                   | Annex, point 4.11                                |
| <b>12 January 2009</b>  | Directive 2008/112/EC enters into force, replacing the word preparation with mixture in Article 2, points 3 and 8, to align the directive with Regulation (EC) No 1272/2008 on classification, labelling and packaging; Member States had to adopt the national measures by 1 April 2010 and apply them from 1 June 2010 | Art. 6, Art. 7(1) and Art. 8                     |
| <b>1 January 2010</b>   | Phase II maximum VOC content limit values apply to the twelve paint and varnish subcategories of Annex II section A; the vehicle refinishing limit values of section B are not changed and stay at their 2007 level                                                                                                      | Annex II, sections A and B                       |

---

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                             |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>10 December 2010</b> | Commission Directive 2010/79/EU enters into force, replacing Annex III with the test methods ISO 11890-2 of 2006, ISO 11890-1 of 2007 and ASTM D 2369 of 2003; Member States had to transpose it by 10 June 2012                                                                                                                                                                                                                                                                                                                                                                             | Art. 1, Art. 2(1), Art. 3 and the Annex                     |
| <b>31 December 2010</b> | Last day on which products shown to have been produced before 1 January 2010 and not meeting the Phase II limits may be placed on the market                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Art. 3(4)                                                   |
| <b>7 January 2014</b>   | Directive 1999/13/EC on solvent emissions from installations, which Article 3(2) of the Paints Directive refers to and which Article 13 of the Paints Directive amended, is repealed by Directive 2010/75/EU on industrial emissions; references to it are construed as references to that directive, whose Chapter V and Annex VII now govern solvent activities. EUR-Lex records Article 13 of the Paints Directive as itself partly repealed by that directive with effect from the same date, its end of validity being 6 January 2014, since the provision it amended no longer exists. | Art. 81(1) and (3), Art. 56 and Annex VII, Part 1, point 13 |
| <b>31 December 2015</b> | Danish executive order nr. 1369 of 25 November 2015 on the marketing and labelling of volatile organic compounds in certain paints and varnishes and vehicle refinishing products enters into force, replacing order nr. 1049 of 27 October 2005                                                                                                                                                                                                                                                                                                                                             | § 8                                                         |
| <b>1 July 2018</b>      | Directive 2001/81/EC on national emission ceilings, the act recital 1 and Article 9(1) of the Paints Directive build on, is repealed by Directive (EU) 2016/2284 on the reduction of national emissions of certain atmospheric pollutants, with its Articles 1 and 4 and Annex I continuing to apply until 31 December 2019                                                                                                                                                                                                                                                                  | Art. 21(1)                                                  |
| <b>26 July 2019</b>     | Regulation (EU) 2019/1243 applies: Article 11 becomes a delegated-act empowerment to amend Annex III, Article 11a on the exercise of the delegation is inserted with a five-year tacitly renewable delegation from 26 July 2019, and Article 12(3) is deleted                                                                                                                                                                                                                                                                                                                                | Annex, point 3                                              |
| <b>1 September 2020</b> | Regulation (EU) 2018/858 repeals Directive 2007/46/EC, which had itself repealed Directive 70/156/EEC from 29                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Art. 88; Art. 49                                            |

April 2009; the reference to road vehicles as defined in Directive 70/156/EEC in Annex I, point 2 of the Paints Directive is therefore read as a reference to Regulation (EU) 2018/858

---

**16 July 2021**

Regulation (EU) 2019/1020 applies: Articles 6 and 7 of the directive, the national monitoring programme and the reporting duty, are deleted, and the directive becomes point 17 of Annex I to that regulation, so its market surveillance powers cover these products; Article 4 of the regulation does not apply, because Article 4(5) does not list the directive

Art. 2(1), Art. 4(5), Art. 38, Art. 44 and Annex I, point 17

---

## Obligations by role

---

### Manufacturer, formulator or brand owner

- Classify every product into exactly one Annex I subcategory: one of the twelve paint and varnish subcategories (a) matt interior wall and ceiling coatings, (b) glossy interior wall and ceiling coatings, (c) exterior mineral wall coatings, (d) interior or exterior trim and cladding paints, (e) trim varnishes and woodstains, (f) minimal build woodstains, (g) primers, (h) binding primers, (i) one-pack performance coatings, (j) two-pack performance coatings, (k) multicoloured coatings and (l) decorative effect coatings, or one of the five vehicle refinishing subcategories (a) preparatory and cleaning, (b) bodyfiller or stopper, (c) primer, (d) topcoat and (e) special finishes. The subcategory decides both the limit value and the label. Annex I, points 1.1 and 2.1
- Keep the VOC content of the product in its ready for use condition at or below the Annex II limit value for its subcategory, distinguishing water-borne coatings, whose viscosity is adjusted with water, from solvent-borne coatings, whose viscosity is adjusted with organic solvent, because the two carry different limits in eleven of the twelve paint and varnish subcategories.

Art. 2, points 10 and 11, Art. 3(1) and Annex II, section A

- Where solvents or other components containing solvents have to be added for the product to be ready for use, design the mixing ratio so that the limit value is met by the product in its ready for use condition, not by the concentrate in the tin. Art. 3(1), third subparagraph
- Determine the VOC content with an Annex III method: ISO 11890-2 of 2006 for products below 15 % VOC by mass where reactive diluents are not present, ISO 11890-1 of 2007 or ISO 11890-2 of 2006 at or above 15 % by mass where reactive diluents are not present, and ASTM D 2369 of 2003 where reactive diluents are present. Remember that VOC which react chemically during drying to form part of the coating are not counted, and that for vehicle refinishing products other than subcategory (a) any water content of the ready for use product is discounted.

Art. 2, point 6, Art. 3(1), Annex II, section B, footnote, and Annex III

- Label every product with the subcategory of the product and the relevant VOC limit values in g/l as referred to in Annex II, and the maximum content of VOC in g/l of the product in a ready to use condition. Both elements are mandatory; the limit value on the label is the EU phase limit for that subcategory, not the measured content. Art. 4
- Apply for an individual licence from the competent authority before supplying a product that exceeds its limit value for the restoration or maintenance of a building or vintage vehicle designated as of particular historical and cultural value, and keep the supply within the strictly limited quantities the licence allows; in Denmark Miljøstyrelsen grants these licences. Art. 3(3); § 5
- Treat the VOC label as an addition to, not a substitute for, the chemicals rules: the directive is without prejudice to measures, including labelling requirements, taken at Union or national level to protect the health of consumers and workers and their working environment, and the definitions of mixture and coating were aligned with Regulation (EC) No 1272/2008 on classification, labelling and packaging in 2009. Art. 1(4) and Art. 2, points 3 and 8; Art. 6

## Importer bringing products into the Union

- Treat import as placing on the market: importation into the Union customs territory is deemed placing on the market under the directive, so the prohibition on over-limit products and the label duty bite on the importer directly and cannot be passed back to a non-EU supplier. *Art. 2, point 12, and Art. 3(1)*
- Obtain from the supplier, before the first shipment, the subcategory assignment and the VOC determination of the product in its ready for use condition, made with one of the Annex III methods, because compliance with the Annex II limit values is established with those methods and with no other. *Art. 3(1) and Annex III*
- Check the label before the goods are released: it must name the subcategory, the relevant Annex II VOC limit values in g/l and the maximum VOC content in g/l of the product ready for use. Neither Article 4 nor the Danish executive order sets a language rule for that information, but the hazard information the same tin carries under Regulation (EC) No 1272/2008 must be in the language of the Member State of sale, so plan the artwork for the market's language in any case. *Art. 4*
- Give imported goods extra scrutiny: in the Commission's second implementation report, 6 % of the samples taken at importers failed the stricter Phase II limits in 2010, the highest share at any level of the chain, and importers also had the highest rate of label non-compliance. Against the Phase I limits importers came second at 2,4 %, just behind wholesalers at 2,5 %. *section 2.3*
- Do not rely on the solvent-installation exemption for general stock: it covers only products sold for exclusive use in an activity carried out in a registered or authorised installation, and in Denmark § 3, stk. 4 lifts only the rules in § 3, stk. 1-3, so on the better reading the labelling ban in § 4 stays intact. *Art. 3(2); § 3, stk. 4, and § 4*
- In Denmark, note that the national order bans the import, the sale and the use of an unlabelled product, so an unlabelled consignment is unlawful at the border and not only at the point of sale. *§ 4*

## **Wholesaler, retailer or builders merchant**

- Supply only products whose VOC content is within the Annex II limit for their subcategory: making a product available to third parties, whether in exchange for payment or not, is placing it on the market, so a wholesaler, builders merchant or retailer is covered by the prohibition on its own account.

Art. 2, point 12, and Art. 3(1)

- Check on goods-in that every tin carries the subcategory, the relevant Annex II limit value in g/l and the maximum VOC content in g/l of the product ready for use, and that the stated content is at or below the stated limit; a mislabelled product can be challenged even where its actual content would have been acceptable. Art. 4
- Expect the checks at your level: the Commission's report records that paint and varnish products sold by retailers accounted for 41 % of the samples analysed for VOC content and that products at wholesalers accounted for 41 % of all label checks, out of some 19 000 analyses and 121 000 label checks across the Union in 2010. section 2.2
- In Denmark, be ready for the chemicals inspection's powers: it may enter premises without a court order and take samples free of charge, buy products under a hidden identity, require a seller using an online interface to send sample copies at its own expense, and order online content changed or removed.  
§ 49 and § 50
- Plan for a withdrawal: the Commission's report records that withdrawal of the product from the market was the most common sanction for breaching the VOC limits, while label breaches were usually met with an order to correct within a deadline, and Danish law lets the authority order the responsible party to inform users, remedy the defect, recall the product from distributors or users and destroy it at its own expense. section 2.3; § 48 and § 48 a

### **Professional user: painting contractor, body shop or coating installation**

- Keep on-site mixing inside the limit: where solvents, hardener or other components containing solvents are added before application, the Annex II limit value applies to the VOC content of the product in its ready for use condition, so a compliant concentrate thinned beyond the manufacturer's ratio can put the applied product over the limit. Art. 3(1), third subparagraph
- Read the tin: the subcategory, the applicable VOC limit value in g/l and the maximum VOC content of the ready for use product are on the label by law, and in Denmark using a product that lacks that information is itself prohibited and punishable. Art. 4; § 4 and § 7, stk. 1, nr. 1
- If you run a coating installation, read the solvent rules behind the Article 3(2) exemption before you rely on it. The exemption only reaches products sold for exclusive use in an activity listed in Part 1 of Annex VII to Directive 2010/75/EU that reaches the consumption threshold in Part 2, carried out in an installation with a permit or, where the Member State has set one up, a registration for installations covered only by Chapter V. Point 13 of Part 1, vehicle refinishing, is narrower than its name: it covers the original coating of road vehicles or parts of them with refinishing-type materials away from the manufacturing line and the coating of trailers, above 0,5 tonnes of solvent a year under item 6 of Part 2. It does not cover the repair, conservation or decoration refinishing a body shop does, because Article 13 of the Paints Directive deleted exactly that activity from the solvent regime in 2004 and moved it to this product regime instead, leaving Member States free under Article 13(2) to keep or introduce national emission rules for it. In Denmark that means an installation notified under executive order nr. 1491 of 7 December 2015 or authorised as a listed activity.

Art. 4(1), Art. 56, Annex VII, Part 1, point 13, and Part 2, item 6; § 3, stk. 4; title and § 1

- Buy over-limit products for heritage work only under an individual licence, in the strictly limited quantities it allows, and observe its conditions; in Denmark Miljøstyrelsen issues the licence and breaching a condition is punishable by a fine rising to imprisonment of up to 2 years in aggravating circumstances. Art. 3(3); § 5 and § 7
- Remember that a compliant product cannot be kept out of your market on VOC grounds: Member States may not prohibit, restrict or prevent the placing on the market of a product that complies with the directive in its ready for use condition, so a supplier's claim that a lower national limit applies should be checked against Article 8. Art. 8

## Penalties

---

Member States lay down the rules on penalties applicable to infringements of the national provisions adopted under the directive and take the necessary measures to ensure they are implemented; the penalties must be effective, proportionate and dissuasive, and had to be notified to the Commission by 30 October 2005, with any later amendment notified without delay. The directive contains no Union safeguard procedure of its own: since 16 July 2021 it is point 17 of Annex I to Regulation (EU) 2019/1020, so the surveillance authorities' powers under that regulation apply, including requiring documents and information, carrying out inspections and taking samples, requiring an economic operator to take corrective action, prohibiting or restricting the making available of a product and ordering its withdrawal, recall or destruction; Article 4 of that regulation, which requires an economic operator established in the Union, does not apply to these products because Article 4(5) does not list the directive. The Commission's second implementation report records that withdrawal of the product from the market was the most common response to a breach of the VOC content limits, while a breach of the labelling requirements was usually met with an order to correct the mistake within a set period in order to avoid prosecution or financial penalties. In Denmark, executive order nr. 1369 of 25 November 2015 punishes with a fine the placing on the market of a product whose VOC content exceeds the limit, the import, sale or use of an unlabelled product, the failure to use the prescribed analytical methods and the breach of a condition in a heritage licence; the fine rises to imprisonment of up to 2 years where the breach was intentional or grossly negligent and caused or risked harm to human or livestock life or health, caused or risked damage to the environment, or obtained or was intended to obtain an economic advantage, and companies can be held criminally liable. Behind the order stands the chemicals act: Miljøstyrelsen must have an unlawful situation made lawful and stop the sale, and may order the responsible party at its own expense to inform users of the danger and how to prevent it, to remedy the cause, to recall the product from distributors or users and to destroy it safely, may carry out ordered measures at that party's expense, may seize unlawful products, may prohibit import, sale or use where the required information is not provided, may order the owner of an online interface to change or remove content that refers to unlawful products, and may ask the court to block an online interface, which the court decides by order and only to eliminate a serious risk, either where an order to change or remove content has not been complied with or where non-compliant products have repeatedly been sold or brokered through that interface, and may publish the orders and prohibitions with the names of the producers, importers or dealers concerned.

Art. 10; Art. 2(1), Art. 4(5), Art. 14, Art. 16 and Annex I, point 17; section 2.3; § 6 and § 7; § 45(1), § 47 b, § 48, § 48 a, § 48 b, § 49, §

## Checklist

---

- 1. Decide whether each product is a paint or varnish applied to buildings, their trim and fittings and associated structures, or a vehicle refinishing product used away from the manufacturing line; aerosols are outside the paints and varnishes family but inside vehicle refinishing subcategory (e) (Annex I, points 1 and 2).
- 2. Assign every in-scope product to exactly one of the twelve paint and varnish subcategories or the five vehicle refinishing subcategories, and record the reasoning, because the subcategory fixes the limit and the label (Annex I, points 1.1 and 2.1).
- 3. Record for each paint or varnish whether it is water-borne or solvent-borne: eleven of the twelve subcategories carry different limits for the two types (Article 2, points 10 and 11, and Annex II, section A).
- 4. Determine the VOC content of the product in its ready for use condition with the right Annex III method for its VOC mass fraction and for whether reactive diluents are present, and keep the test report (Article 3(1) and Annex III).
- 5. Compare the determined content with the Phase II limit for paints and varnishes or the section B limit for vehicle refinishing products, and reformulate where it is over (Annex II).
- 6. Put the subcategory, the relevant Annex II VOC limit value in g/l and the maximum VOC content in g/l of the ready for use product on every label, and check that the artwork survives translation and pack-size changes (Article 4).
- 7. Document any exemption you rely on: exclusivity of supply to a registered or authorised solvent installation, or an individual heritage licence and the quantities it covers (Article 3(2) and (3)).
- 8. In Denmark, check the product against executive order nr. 1369/2015: its § 3, stk. 4 lifts only 'bestemmelserne i stk. 1-3', so on the better reading the § 4 ban on importing, selling or using an unlabelled product survives the solvent-installation derogation — label these products unless you have Danish advice to the contrary.

## Sources

---

1. Directive 2004/42/EC on VOC emissions from certain paints, varnishes and vehicle refinishing products, consolidated text of 16 July 2021 (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02004L0042-20210716>
2. Directive 2004/42/EC as published in OJ L 143, 30 April 2004 (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32004L0042>
3. Document information, dates, amendments and corrigenda for CELEX 32004L0042 (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32004L0042>
4. Regulation (EC) No 1137/2008 adapting acts to Decision 1999/468/EC, which replaced Article 11 and Article 12(3) (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008R1137>
5. Directive 2008/112/EC aligning the directive with Regulation (EC) No 1272/2008 on classification, labelling and packaging (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0112>
6. Commission Directive 2010/79/EU adapting Annex III to technical progress (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0079>
7. Regulation (EU) 2019/1243 replacing the comitology empowerment with delegated acts (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R1243>
8. Regulation (EU) 2019/1020 on market surveillance and compliance of products, which deleted Articles 6 and 7 and lists the directive in Annex I (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R1020>
9. Regulation (EU) 2019/1020 on market surveillance and compliance of products, consolidated text of 23 May 2024 (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02019R1020-20240523>
10. Directive 2010/75/EU on industrial emissions, consolidated text of 4 August 2024, which repealed Directive 1999/13/EC and covers solvent activities in Chapter V and Annex VII (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02010L0075-20240804>
11. Regulation (EU) 2018/858 on the approval and market surveillance of motor vehicles, which replaced Directive 2007/46/EC and, through it, Directive 70/156/EEC (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0858>
12. COM(2013) 704, the Commission's second report on the implementation of the Paints Directive (EUR-Lex) — <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0704>
13. Summary of the directive: emissions of volatile organic compounds in paints, varnishes and vehicle refinishing products (EUR-Lex) — <https://eur-lex.europa.eu/EN/legal-content/summary/emissions-of-volatile-organic-compounds-in-paints-varnishes-and-vehicle-refinishing-products.html>
14. Bekendtgørelse nr. 1369 af 25. november 2015 om markedsføring og mærkning af flygtige organiske forbindelser i visse maling og lakker samt produkter til autoreparationslakering (Retsinformation) — <https://www.retsinformation.dk/eli/lta/2015/1369>
15. Bekendtgørelse af lov om kemikalier, LBK nr. 1200 af 25. september 2025 (Retsinformation) — <https://www.retsinformation.dk/eli/lta/2025/1200>
16. Faktaark: flygtige organiske forbindelser (VOC) i maling og lak til brug i bygninger (Miljøstyrelsen) — <https://mst.dk/erhverv/sikker-kemi/kemikalier/regler-og-handlingsplaner/faktaark-om-kemikalierereglerne/faktaark-flygtige-organiske-forbindelser-voc-i-maling-og-lak-til-brug-i-bygninger>

- .7. Faktaark: flygtige organiske forbindelser (VOC) i produkter til auto-reparationslakering (Miljøstyrelsen) —  
<https://mst.dk/erhverv/sikker-kemi/kemikalier/regler-og-handlingsplaner/faktaark-om-kemikalierereglerne/faktaark-flygtige-organiske-forbindelser-voc-i-produkter-til-auto-reparationslakering>
- .8. Maling, lak og andre produkter til overfladebehandling (Miljøstyrelsen) —  
<https://mst.dk/erhverv/sikker-kemi/kemikalier/fokus-paa-saerlige-produkter/maling-lak-og-andre-produkter-til-overfladebehandling>

---

Generated from <https://www.conphora.com/regulations/pvd/> on 13 October 2026

Written from the official text on EUR-Lex and the Commission's guidance, with a source for every fact. It is not legal advice.