

COMMISSION DIRECTIVE 1999/75/EC
of 22 July 1999
amending Commission Directive 95/45/EC laying down specific purity criteria concerning colours
for use in foodstuffs
(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 89/107/EEC of 21 December 1988 on the approximation of the laws of the Member States concerning food additives authorised for use in foodstuffs intended for human consumption ⁽¹⁾, as amended by European Parliament and Council Directive 94/34/EC ⁽²⁾, and in particular Article 3(3)(a) thereof;

After consulting the Scientific Committee for Food,

- (1) Whereas European Parliament and Council Directive 94/36/EC of 30 June 1994 on colours for use in foodstuffs ⁽³⁾, lists those substances which may be used as colours in foodstuffs;
- (2) Whereas Commission Directive 95/45/EC of 26 July 1995 laying down specific purity criteria concerning colours for use in foodstuffs ⁽⁴⁾ sets out the purity criteria for the colours mentioned in Directive 94/36/EC;
- (3) Whereas it is necessary, in the light of technical progress, to amend the purity criteria set out in Directive 95/45/EC for mixed carotenes (E160a (i)); whereas it is consequently necessary to adapt this Directive;
- (4) Whereas it is appropriate to take into account the specifications and analytical techniques for colours as set out in the Codex Alimentarius and the Joint FAO/WHO Expert Committee on Food Additives (JECFA);
- (5) Whereas the measures provided for in this Directive are in accordance with the opinion of the Standing Committee on Foodstuffs;

HAS ADOPTED THIS DIRECTIVE:

Article 1

Directive 95/45/EC is hereby amended as follows:

In the Annex part B the chapter concerning E 160a (i) Mixed Carotenes is replaced by the text of the Annex to this Directive.

Article 2

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 1.7.2000. They shall immediately inform the Commission thereof.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.

Article 3

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

Article 4

1. This Directive is addressed to the Member States.

Done at Brussels, 22 July 1999.

For the Commission

Karel VAN MIERT

Member of the Commission

⁽¹⁾ OJ L 40, 11.2.1989, p. 27.

⁽²⁾ OJ L 237, 10.9.1994, p. 1.

⁽³⁾ OJ L 237, 10.9.1994, p. 13.

⁽⁴⁾ OJ L 226, 22.9.1995, p. 1.

ANNEX

'E 160a (i) mixed carotenes

1. PLANT CAROTENES

Synonyms

CI Food Orange 5

Definition

Mixed carotenes are obtained by solvent extraction of natural strains of edible plants, carrots, vegetable oils, grass, alfalfa (lucerne) and nettle.

The main colouring principle consists of carotenoids of which beta-carotene accounts for the major part. α , γ -carotene and other pigments may be present. Besides the colour pigments, this substance may contain oils, fats and waxes naturally occurring in the source material.

Only the following solvents may be used in the extraction: acetone, methyl ethyl ketone, methanol, ethanol, propan-2-ol, hexane, dichloromethane and carbon dioxide.

Class

Carotenoid

Colour Index No

75130

EINECS

230-636-6

Chemical formula

 β -Carotene: $C_{40}H_{56}$

Molecular weight

 β -Carotene: 536,88

Assay

Content of carotenes (calculated as β -carotene) is not less than 5 %. For products obtained by extraction of vegetable oils: not less than 0,2 % in edible fats

$E_{1\%}^{1\text{cm}}$ 2 500 at ca 440 nm — 457 nm in cyclohexane

Identification

A. Spectrometry

Maximum in cyclohexane at 440 nm — 457 nm and 470 nm — 486 nm

Purity

Solvent residues

Acetone	}	Not more than 50 mg/kg, singly or in combination
Methyl ethyl ketone		
Methanol		
Propan-2-ol		
Hexane		
Ethanol		

Dichloromethane

Not more than 10 mg/kg

Arsenic

Not more than 3 mg/kg

Lead

Not more than 10 mg/kg

Mercury

Not more than 1 mg/kg

Cadmium

Not more than 1 mg/kg

Heavy metals (as Pb)

Not more than 40 mg/kg

2. ALGAL CAROTENES

Definition

Mixed carotenes may also be produced from the algae *Dunaliella salina*, grown in large saline lakes located in Whyalla, South Australia. Beta-carotene is extracted using an essential oil. The preparation is 20-30 % suspension in soya bean oil containing natural tocopherols (up to 0,3 %). The ratio of trans-cis isomers is in the range of 50/50 — 71/29.

The main colouring principle consists of carotenoids of which beta-carotene accounts for the major part. Alpha-carotene, lutein, zeaxanthin and beta-cryptoxanthin may be present. Besides the colour pigments, this substance may contain oils, fats and waxes naturally occurring in the source material.

Class

Carotenoid

Colour Index No

75130

Assay

Content of carotenes (calculated as β -carotene) is not less than 20 %.**Identification**

A. Spectrometry

Maximum in cyclohexane at 448 nm — 457 nm and 474 nm — 486 nm

Purity

Arsenic

Not more than 3 mg/kg

Lead

Not more than 10 mg/kg

Mercury

Not more than 1 mg/kg

Cadmium

Not more than 1 mg/kg

Heavy metals (as Pb)

Not more than 40 mg/kg'