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to the

COMMISSION REGULATION (EU) .../...

**amending Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of
the Council and the Annex to Commission Regulation (EU) No 231/2012 as regards
Cochineal, Carminic acid, Carmines (E 120)**

ANNEX

In the Annex to Regulation (EU) No 231/2012 the entry for 'E 120 Cochineal, Carminic acid, Carmine' is replaced by the following:

E 120 CARMINIC ACID, CARMINE	
Synonyms	CI Natural Red 4
Definition	<p>Carminic acid is obtained from aqueous, aqueous alcoholic or alcoholic extracts from Cochineal, which consists of the dried bodies of the female insect <i>Dactylopius coccus</i> Costa.</p> <p>Carmine is aluminium lake of carminic acid in which aluminium and carminic acid are thought to be present in the molar ratio 1:2.</p> <p>The colouring principle is carminic acid. Minor amounts of its aminated form 4-aminocarminic acid may also be present.</p> <p>In commercial products the colouring principle carminic acid may be present in association with ammonium, calcium, potassium or sodium cations, singly or in combination, and these cations may also be present in excess. Commercial products may also contain proteinaceous material derived from the source insect.</p>
Colour Index No	75470
Einecs	Carminic acid: 215-023-3; carmine: 215-724-4
Chemical name	7-β-D-glucopyranosyl-3,5,6,8-tetrahydroxy-1-methyl-9,10-dioxoanthracene-2-carboxylic acid (carminic acid); carmine is the hydrated aluminium chelate of this acid
Chemical formula	C ₂₂ H ₂₀ O ₁₃ (carminic acid)
Molecular weight	492,39 (carminic acid)
Assay	Content not less than 90 % carminic acid; not less than 50 % carminic acid in the chelates.
Description	Red to dark red, friable, solid or powder
Identification	
Spectrometry	<p>Carminic acid:</p> <p>Maximum in aqueous ammonia solution at ca. 518 nm</p> <p>Maximum in dilute hydrochloric solution at ca. 494 nm</p> <p>E 1%/1cm 139 at peak around 494 nm in dilute hydrochloric acid</p> <p>4-aminocarminic acid:</p> <p>Maximum in aqueous ammonia solution at 535 nm</p> <p>Maximum in dilute hydrochloric solution at 530 nm</p> <p>E 1%/1cm 260 at peak around 535 nm in aqueous ammonia solution, pH 9,5</p> <p>In commercial products carminic acid may be differentiated from its amine by HPLC</p>

Purity	
Solvent residues	Ethanol: Not more than 150 mg/kg Methanol: Not more than 50 mg/kg
Total ash	Carminic acid: Not more than 5 % Carmine: Not more than 12 %
Protein (N x 6.25)	Carminic acid: Not more than 2,2 % Carmine: Not more than 25 %
4-aminocarminic acid	Not more than 3 % relative to carminic acid
Matter insoluble in dilute ammonia	Carmine: Not more than 1 %
Arsenic	Not more than 1 mg/kg
Lead	Not more than 1,5 mg/kg
Mercury	Not more than 0,5 mg/kg
Cadmium	Not more than 0,1 mg/kg
Microbiological criteria	
<i>Salmonella</i> spp.	Absent in 10 g

Aluminium lakes of this colour may be used.