

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية

STANDARDIZATION ORGANIZATION FOR G.C.C (GSO)

Final draft

GSO/ FDS .../2013

مضافات الأغذية – الزيوت المعدنية ذات الدرجة الغذائية

Food additives- Food grade mineral oils

Prepared by:

Gulf technical committee for sector standards of

Food and agriculture products

This document is a draft Gulf standard circulated for comments, it is therefore, subject to alteration and modification, and may not be referred as a Gulf standard, until approved by the Board of Directors.

ICS: 67.220.20

Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions are to issue Gulf Standards/ Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No.(5) "Gulf technical committee for sector Standards of Foods and Agricultural products" has prepared the Gulf Standard for " . The draft Standard has been prepared by State of Qatar. Food additives- Food grade mineral oils".

This Standard has been approved as a Gulf Technical Regulation by GSO Board of Directors in its meeting No. (), held on / / H, / / G.

Food additives- Food grade mineral oils

1-Scope:

This Gulf Standard is concerned with the requirements which should be met in food grade mineral oils used in food products as glazing, antifoaming agent and as protective coating.

2-Complementary Standards:

2.1 GSO 9" Labeling of prepackaged food stuffs".

2.2 GSO 150" Expiration periods of food products" .

2.3 GSO 168" Conditions of storage facilities for dry and canned food stuffs" .

2.4 GSO/CAC 192" General Standard for food additives" .

2.5 GSO/CAC 107" General Standard for the labeling of food additives when sold as such" .

2.6 GSO 988" Limits of radioactivity levels permitted in food stuffs- Part 1" .

2.7 GSO 839" Food packages- Part 1: General requirements" .

3- Definitions:

Food grade mineral oil: A mixture of refined paraffinic and naphthenic liquid hydrocarbons, obtained from mineral crude oil through refining steps (e.g. Distillation, extraction and crystallization) subsequent purification by acid and/ or catalyst hydro treatment.

Synonyms: Liquid paraffin, White mineral oil.

4- Types:

4.1 High viscosity food grade mineral oil.

4.2 Low and medium viscosity food grade mineral oil, and divided into three grades: first, second and third.

5- Guidance numbers:

INS: High viscosity food grade mineral oil 905d.

Low and medium viscosity food grade mineral oil 905e.

C.A.S number: 8012-95-1.

6-Description:

Oily liquid, colorless, transparent and free from fluorescence in day light .

7- Characteristics:

7.1 The following characteristics shall be met in high or low and medium food grade mineral oil according the following table:

Characteristic	High viscosity	Low and medium viscosity	
Boiling point	Above 350°C	Above 200°C	
Solubility	Insoluble in water, soluble in ethanol and methanol	Insoluble in water, soluble in ethanol and methanol	
Burning	Burns with bright flame and with paraffin- like characteristic smell	Burns with bright flame and with paraffin- like characteristic smell	
Viscosity at 100°C	Not less than 11 mm²/s	Class 1	8.5 -11 mm²/s
		Class 2	7.0- 8.5 mm²/s
		Class 3	3.0- 7.0 mm²/s
Average molecular weight	Not less than 500	Class 1	480- 500
		Class 2	400-480
		Class 3	300-400
Carbon number	Not less than 28	Class 1	Not less than 25
		Class 2	Not less than 22
		Class 3	Not less than 17
Distillation point	The boiling point at 5% distillation point is higher than 422°C	Class 1	higher than 391°C
		Class 2	higher than 356°C
		Class 3	higher than 287°C
Lead content	Not more than 1 mg/kg	Not more than 1 mg/kg	

7.2 Limits of radioactivity levels for the product shall be complying with Gulf Standard stated in Item (2.6).

8- Packaging, transportation and storage:

8.1 Packaging:

8.1.1 Without prejudice to what mentioned in Gulf Standard stated in Item(2.7), the product shall be packed in suitable containers, keep the product and protect it from any pollution lead to changes its prosperities or fitting for human consumption.

8.2 Transportation:

The product shall be transported with sound and clean transportation means, not used previously in transport any toxic or harmful substances and the transportation process shall be carried out by a way not lead to damage of the product.

8.3 Storage:

Without prejudice to what mentioned in Gulf Standard stated in Item (2.3), the stores shall be good ventilation far from heat and contamination sources.

9- Labeling:

Without prejudice to what mentioned in Gulf Standards stated in Items (2.1, 2.2), the following shall be declare on the label of the product:

9.1 Producer or packer name and the trade mark.

9.2 International number.