

#### **GOVERNMENT NOTICE**

#### **DEPARTMENT OF MINERALS AND ENERGY**

No. R. 1078

#### 4 November 2005

#### PETROLEUM PRODUCTS ACT, 1977 (Act No. 120 of 1997).

# REGULATIONS REGARDING PETROLEUM PRODUCTS SPECIFICATIONS AND STANDARDS

The Minister of Minerals and Energy has under section 12C (1)(e) and (f) of the Petroleum Products Act, 1977 (Act No. 120 of 1977) made the regulations in the Schedule.

#### **SCHEDULE**

### **ARRANGEMENT OF REGULATIONS**

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### Definitions

 In these regulations any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned and unless the context otherwise indicates -

"the Act" means the Petroleum Products Act, 1977 (Act No. 120 of 1977), as amended;

"additive" means a chemical substance intentionally added to petroleum products in trace or small quantities in order to improve one or more of. the petroleum product's performance or storage stability, its performance in an engine or intended to reduce the emissions from an engine powered by that petroleum product;

"aromatics" means a group of hydrocarbons that contain a benzene skeleton in their molecular structure;

"**biodiesel**" means a biodegradable and renewable fuel or fuel additive for diesel engines derived from natural oils extracted from vegetable matter, and that conforms to South African National Standard, Automotive Biodiesel, SANS 1935;

"**blend**" means a mixture of two or more compatible petroleum products having different properties in order to produce an intermediate or final petroleum product with desired attributes;

"**bowser**" means an apparatus erected on a site for the purposes of pumping petrol or diesel from an underground tank and dispensing it into a motor vehicle;

"coastal zone" refers to magisterial districts listed in Annexure A as coastal;





"Controller" means the Controller of Petroleum Products as contemplated in section 3(1) of the Act;

"end-consumer" means a person acquiring a petroleum product for own use and consumption;

"**grade**" means the classification of a petroleum product according to its chemical composition and characteristics such as its RON rating, sulphur content, additives content and the quantity or proportion thereof;

"inland zone" refers to magisterial districts listed in Annexure A as inland;

"**label**" means a marking affixed to a bowser on a site that specifies the grade of petrol or diesel dispensed by that bowser;

"licensee" means a person to whom the Controller has issued a manufacturing, wholesale or retail licence in accordance with the provisions of the Act;

"low-emission diesel" means diesel used in underground mines with a sulphur content of not more than 0.005 percent by mass and conforms to the South African National Standard, 'Low-emission dieselfuel for use in underground mines', SANS 1755;

"**low-sulphur grade diesel**" means diesel with a sulphur content of not more than 0.005 percent by mass and conforms to the South African National Standard , *'Automotive dieselfuel'*, SANS 342;



"metal-containing petrol" means petrol containing metal based additives, other than lead, with a RON of either 93 or 95, otherwise referred to as "lead replacement petrol" or "RP";

"metal-free petrol" means petrol that does not contain any metal -based additives, with a RON of 91, 93 or 95, otherwise referred to as "unleaded petrol" or "ULP";

**"MTBE"** means methyl tertiary-butyl ether with a chemical composition of CH<sub>3</sub>OC(CH<sub>3</sub>)<sub>3</sub>;

**"RON"** refers to research octane number, which is a measure indicating the capacity of petrol to prevent engine knocking at low speed;

"SANS" means South African National Standards published by the South African Bureau of Standards in terms of the Standards Act, 1993 (Number 29 of 1993) and a number occurring immediately after SANS means the numbered standard;

"standard grade diesel" means diesel with a sulphur content of not more than 0.05 percent by mass and conforms to the South African National Standard, 'Automotive diesel fuel', SANS 342;

"v/v" means volume for volume.



### **Scope of regulation**

2 This regulation prescribes specifications and standards for petroleum products that may be sold in the Republic of South Africa.

### Petrol grades permitted

- 3 The permitted grades of petrol that may be sold to an end-consumer are restricted to-
  - (1) metal-free petrol with a RON of 91;
  - (2) metal-free petrol with a RON of 93;
  - (3) metal-free petrol with a RON of 95;
  - (4) metal-containing petrol with a RON of 93; and
  - (5) metal-containing petrol with a RON of 95;
  - (6) petrol grades with a RON of more than 95 provided that
    - a) only licensed wholesalers may sell or provide such petrol;
    - b) such petrol grades are only sold to-
      - (i) persons holding racing licences issued by the Motorsport South Africa; or
      - (ii) legal entities that manufacture motor vehicles where such petrol grades are used for testing purposes; and
    - c) such petrol grades are not stored, sold or provided from a site;
  - (7) petrol with lead additives for use in aeroplanes with internal combustion engines provided that
    - a) only licensed wholesalers may sell or provide such petrol;
    - b) such petrol is only sold to licensed owners or operators of aeroplanes with internal combustion engines for their own use;
    - c) such petrol is not stored, sold or provided from a site.
- 4 Permitted metal-free petrol grades must conform to South African National Standard, Unleaded Petrol, SANS 1598, provided that-





- (1) the RON rating must be 91, 93 or 95;
- (2) the maximum permitted traces of lead as contamination must not exceed 5 milligrams per litre;
- (3) the maximum permitted content of aromatics is 42% v/v;
- (4) the maximum permitted benzene content is 3% v/v.
- 5 Metal additives intended to enhance octane ratings or limit valve seat recession in internal combustion engines must only be used in metalcontaining petrol.
- 6 Permitted metal-containing petrol must conform to South African National Standard, Leaded Petrol, SANS 299 provided that-
  - (1) the RON rating must be either 95 or 93;
  - (2) the maximum permitted traces of lead as contamination must not exceed 5 milligrams per litre;
  - (3) manganese based additives must not exceed 18 milligrams per litre;
  - (4) potassium based additives must not exceed 10 milligrams per litre;
  - (5) phosphorous based additives must not exceed 14 milligrams per litre;
  - (6) only one of the additives referred to in sub-regulations (3), (4) and(5) is added to such petrol;
  - (7) the maximum permitted content of aromatics is 42% v/v; and
  - (8) the maximum permitted benzene content is 3% v/v.

### **Petrol zones**

- 7 Permitted metal-free petrol grades may be sold throughout the Republic.
- 8 Metal-containing petrol with a RON of 95 must only be sold in the coastal zone.
- 9 Metal-containing petrol with a RON of 93 must only be sold in the inland zone.





### **Diesel grades permitted**

- 10 The permitted grades of diesel that may be sold to an end-consumer are restricted to-
  - (1) standard grade diesel;
  - (2) low sulphur grade diesel;
  - (3) biodiesel; and
  - (4) low-emission diesel provided that -
    - a) only licensed manufacturers or wholesalers may sell or provide such diesel;
    - b) such diesel is only sold to end-consumers, that are licensed owners or operators of mines, for their own use;
    - c) such diesel is not stored, sold or provided from a site.
- 11 Permitted standard grade diesel must conform to South Africa nNational Standard, Automotive diesel fuel, SANS 342 provided that -
  - (1) the sulphur content of such diesel is not more than 0.05% by mass;
  - (2) the polycyclic aromatic hydrocarbon content of such diesel is not more than 11% measured on a mass for mass basis; and

(3) such diesel is blended with not more than 5% biodiesel.

- 12 Permitted low sulphur grade diesel must conform to South AfricanNational Standard, Automotive diesel fuel, SANS 342 provided that -
  - the sulphur content of such diesel is not more than 0.005% by mass;
  - (2) the polycyclic aromatic hydrocarbon content of such diesel is not more than 11% measured on a mass for mass basis; and
  - (3) such diesel is blended with not more than 5% biodiesel.
- Permitted low-emission diesel must conform to South African National Standard, Low-emission diesel fuel for use in underground mines,
   SANS 1755, provided that -

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- (1) the sulphur content of such diesel is not more than 0.05% by mass;
- (2) the polycyclic aromatic hydrocarbon content of such diesel is not more than 11% measured on a mass for mass basis; and
- (3) such diesel is blended with not more than 5% biodiesel.
- 14 Permitted biodiesel conforms to South African National Standard, Automotive biodiesel, SANS 1935.

### Prohibition of certain activities

- 15 The sale of petroleum products that do not comply with specifications and standards contemplated in this Regulation is prohibited.
- 16 Offering for sale, selling or providing one grade of petrol or diesel as another grade of petrol or diesel, as the case may be, subject to the provisions of this Regulation is prohibited.
- 17 Offering for sale, selling or providing
  - (1) any blend or mixture of different petroleum products; or
  - (2) any blend or mixture of different petroleum products with other substances;

for the purposes of evading the payment of any tax, duty or levy is prohibited.

- 18 Offering for sale, selling or providing metal-free petrol or metalcontaining petrol, which contains lead additives, subject to the provisions of this Regulation, is prohibited.
- 19 Offering for sale, selling or providing metal-free petrol or metalcontaining petrol, which contains MTBE additives, subject to the provisions of this Regulation, is prohibited.

### Inspection and testing of petroleum products

20 An inspector appointed in accordance with the provisions of section 3 of the Act, may -





- enter and search without a warrant any premises, any vehicle, vessel or aircraft and any receptacle of whatever nature;
- (2) seize, without a warrant, a whole batch or a sample of any petroleum product for purposes of monitoring or verifying compliance with the provisions of this Regulation;
- (3) from time to time, for purposes of monitoring compliance with this Regulation, sample and test petroleum products in accordance with the methods specified in SANS 299, SANS 1598, SANS 1754, SANS 464, SANS 342 or SANS 1935, as appropriate;
- (4) appoint suitably qualified experts to test petroleum products;
- (5) demand of any person owning, offering for sale, selling or providing petroleum products governed by these regulations, a compliance certificate in respect of such petroleum products and such person must, if so instructed, provide the inspector with such certificate; and
- (6) demand of any person importing petroleum products governed by these regulations, any documentation associated with such importation and such person must, if so instructed, provide the inspector with such documentation.
- 21 The cost of sampling and testing contemplated in subregulations 20(2) and 20(3) must -
  - (1) in the case of petroleum products manufactured in Republic of South Africa, be borne by the manufacturer of such petroleum product; and
  - (2) in the case of petroleum products imported into the Republic of South Africa, be borne by the wholesaler of such petroleum product.



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### Permits for deviation from specifications and standards

- 22 A licensee may apply in writing to the Controller for a permit to deviate from the specifications and standards of petroleum products governed by this Regulation.
- 23 Upon receipt of an application for a permit contemplated in sub regulation 22, the Controller must consider the application and consult the Minister in that regard.
- 24 In considering an application contemplated in regulation 22 the Controller must consider the urgency, health, safety, environmental, security, continuity of supply of petroleum products, national interest and logistical implications of granting or refusing such a permit.
- 25 A permit issued by the Controller permitting a licensee to deviate from the provisions of this Regulation must -
  - (1) be in writing and signed by the Controller;
  - (2) specify the period for which the permit is valid and such period must not be longer than 60 days;
  - (3) specify the petroleum products for which the permit applies;
  - (4) specify the extent of the deviation from the provisions of this Regulation permitted; and
  - (5) specify such other conditions as the Controller may consider appropriate.
- 26 Notwithstanding any other penalty that may be imposed under the Att or any other law, the Controller may, in the event of non -compliance by a permit holder with any -
  - condition of a permit contemplated in regulation 25, terminate such permit; or
  - (2) provision of this Regulation, order the permit holder to terminate the distribution and sale of such non-compliant petroleum product, with immediate effect.

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- 27 The Controller may not terminate a permit unless -
  - the permit holder has been informed in writing of the intention to terminate such permit by
    - a) setting out the particulars of such failure or contravention; and
    - b) calling upon the permit holder to make representations that may be necessary, within 7 calendar days from the date of receipt of such notice;
  - (2) the Controller has considered -
    - a) any steps taken by the permit holder to remedy the noncompliance concerned or to prevent any such non-compliance from recurring; and
    - b) any other relevant matters submitted by way of representations.

### **Retail pump labelling**

28 A bowser on a site must have a label affixed to it.

- 29 A label contemplated in regulation 28 must -
  - (1) have lettering and numbering in a font size of Anal 55;
  - (2) face the same direction as the information indicating the price of the petrol or diesel displayed on that bowser; and
  - (3) be positioned not more that 20 centimetres above or below the information displaying the price of the petrol or diesel dispensed from that bowser.
- 30 The petrol or diesel grade dispensed from a bowser must be the petrol or diesel grade specified in the label affixed to that bowser.
- 31 The label to be affixed to a bowser dispensing a metal-free petrol grade must be white lettering and numbering on a green background.
- 32 The label to be affixed to a bowser dispensing metal-free petrol gradeRON 95 must contain only the words and numbers "Unleaded Petrol95 Metal-free."

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- 33 The label to be affixed to a bowser dispensing metal-free petrol grade
  RON 93 must contain only the words and numbers "Unleaded Petrol
  93 Metal-free."
- 34 The label to be affixed to a bowser dispensing metal-free petrol grade
  RON 91 must contain only the words and numbers "Unleaded Petrol
  91 Metal-free."
- 35 The label to be affixed to a bowser dispensing a metal-containing petrol grade must be white lettering and numbering on a red background.
- 36 The label to be affixed to a bowser dispensing metal-containing petrol grade RON 95 must contain only the words and numbers "Lead Replacement Petrol 95 X based," where X is represented as either "manganese" or "potassium" or phosphorus" as appropriate for the type of petrol dispensed from that bowser.
- 37 The label to be affixed to a bowser dispensing metal-containing petrol grade RON 93 must contain only the words and numbers "Lead replacement petrol 93 X based," where X is represented as either "manganese" or "potassium" or phosphorus" as appropriate for the type of petrol dispensed from that bowser.
- 38 The label to be affixed to a bowser dispensing a diesel grade must be white lettering and numbering on a black background.
- 39 The label to be affixed to a bowser dispensing standard grade diesel must contain only the words "Standard diesel."
- 40 The label to be affixed to a bowser dispensing low sulphur grade diesel must contain only the words "Low sulphur diesel."

### Records to be kept by licensees

41 A licensee must keep records of purchase and sale transactions of petroleum products including -

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(1) the grade of petroleum product;



- (2) the quantity of petroleum product;
- (3) in the case of a purchase of a batch of petroleum product, the documentation by which the physical receipt of a petroleum product can be linked to the order, purchase and payment for that batch of petroleum product;
- (4) the results of any tests performed on a batch of petroleum product, including the details of that batch and the date of each test;
- (5) the testing method used;
- (6) the record by which the petroleum product tested can be traced back to its delivery docket; and
- (7) the port of entry, in the case of a batch of imported petroleum product.
- 42 The records contemplated in regulation 41 must be -
  - (1) retained for 5 years; and
  - (2) disclosed to an inspector on request.

#### Transitional provisions and commencement

43 This Regulation comes into effect on 1 January 2006 provided that -

- (1) the provisions of regulations 4(2) and 6 commence on the first Wednesday in April 2006;
- (2) the provisions of regulations 11, 12, 13 and 14 commence on the first Wednesday in March 2006;
- (3) the provisions of this Regulation relating to the labelling of petrol bowsers commence when the petrol dispensed by a bowser conforms to one of the permitted grades of petrol, or on the first Wednesday in April 2006, whichever event occurs first provided that before that event the label on bowsers dispensing metalcontaining petrol must state "Lead replacement petrol 95 contains metals" or "Lead replacement petrol 93 contains metals" as the case may be; and

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- (4) the provisions of this Regulation relating to labelling of diesel bowsers commence when the diesel dispensed by a bowser conforms to one of the permitted grades of diesel, or on the first Wednesday in March 2006, whichever event occurs first.
- 44 A licensed manufacturer must not manufacture, after midnight on 31December 2005 -
  - (1) any petrol grade that is not in compliance with this Regulation; and
  - (2) any diesel grade that is not in complianc with this Regulation.
- 45 A licensed manufacturer or wholesaler must not import petroleu m products, after midnight on 31 December 2005, that are not in compliance with this Regulation.

### **Offences and penalties**

46 Any person performing a prohibited action or committing an offence under this Regulation shall be deemed to have committed an offence under the Act.





#### **Coastal Region Magisterial Districts** A.

NORTHERN CAPE PROVINCE						
Calvinia	Carnarvon	Clanwillians	Namaqualand	Fraseburg		
Kenhardt	Sutherland	Vanrhynsdorp	Victoria West	Veredendal		
Williston						

WESTERN CAPE PROVINCE					
Beaufort West	Beliville	Bredasdorp	Caledon	Calitzdortp	
Kenhardt	Sutherland	Vanrhynsdorp	Victoria West	Veredendal	
Ceres	Clanwilliams	George	Heidelberg	Hermanus	
Hopefield	Knysna	Kuilsriver	Ladismith	Laingsburg	
Montague	Mooreesburg	Mosselbay	Murraysburg	Oudshoom	
Paarl	Picketberg	Prince Albert	Riversdale	Robertson	
Simonstown	Stellebosch	Swellendam	Uniondale	Vredenburg	
Vredendal	Wellington	Worcester	Wynberg		

EASTERN CAPE PROVINCE					
Aberdeen	Adelaide	Albany	Alexandria	Barthust	
Bedford	Bisho	Bizana	Cathcart	Centane	





Cofimvaba	Cradock	Fort Beaufort	Gatyana	Gcuwa
Glen Grey	Graaff Reinet	Hankey	Herschelle	Hewu??
Humansdorp	Idutywa	Jansenville	Joubertina	Kieskamahoek
King Williamstown	Kirkwood	Komga	Lady Grey	Libode
Lusikisiki	Maluti	Mdantsane	Middledrift	Molteno
Mpofui	Mqanduli	Mt Ayliff	Mt Flecther	Murraysburg
Ngcobo	Nqamakwe	Ngqeleni	Pearston	Peddie
Port Elizabeth	Queenstown	Siphaqeni	Somerset East	Steytlerville
Stutterheim	Tabankulu	Tarka	Tsolo	Tsomo
Umzimkulu	Umzimvubu	Victoria	Willowmore	Xalanga
Xhora				

KWAZULU-NATAL PROVINCE					
Alfred	Babanango	Bergville	Danhaeuser	Dundee	
Escourt	Eshowe	Glencoe	Hanover	Hiabisa	
Impendle	Inanda	Ingwavuma	Іхоро	Klipriver	
Kranskop	KwaMashu	Lion River	Lower Mfolozi	Lower Tugela	
Mahiabathini	Mapumulo	Mooi River	Msinga	Mt Currie	
Mtonjeni	Mtunzini	Ndwendwe	Newcastle	Ngotshe	
Nkandla	Nongoma	Nqutu	Paulpietersburg	Pietermaritzburg	





Piet Retief	Polina	Port	Richmond	Ubombo
		Shepstone		
Umlazi	Umzinto	Underberg	Utrecht	Vryheid
Wakkerstroom	Weenen			

### FREE STATE PROVINCE

Harrismith

MPUMALANGA PROVINCE					
Barberton	Kwamhlaswa	Neispruit	Nsikazi	Eerstehoek	
Pilgrims Rest	Pilgrims - Sabie	Volkrust	Witrivier		

LIMPOPO PROVINCE					
Bolobedu	Giyani	Malamulele	Mhala	Namakgale	
Letaba	Palaborwa	Ritavi	Soutspanberg		





#### **Inland Region Magisterial Districts** B.

NORTHERN CAPE PROVINCE					
Barkely West	Bethulie	Britstown	Colesburg	De Aar	
Gordonia	Hanover	Нау	Herbert	Kenhardt	
Kimberly	Kuruman	Noupoort	Phillipollis	Phillipstown	
Posmasburg	Prieska	Richmond	Venterstad	Warrenton	

EASTERN CAPE PROVINCE						
Albert	Alwal North	Baca	Barkley East	Elliot		
Herschelle	Indwe	Lady Grey	Maclear	Qumbu		
Sterkspruit Steynsburg Venterstad Wood House						

FREE STATE PROVINCE					
Bethlehem	Bethulie	Bloemfontein	Boshoff	Bothaville	
Brandfort	Buitfontein	Clorcola	Clorcolan	Dewetshoop	
Edenburg	Excelcior	Fauresmith	Fickburg	Fouriesburg	
Frankfort	Heilbron	Hennenman	Hoopstad	Jacobsdal	
Jagersfontein	Koffiefontein	Koppies	Kroonstad	Ladybrand	
Lindley	Marquard	Odendaalrus	Parys	Petrusburg	
Philipollis?	Reddersburg	Reitz	Rouxville	Sasolburg	







Senekal	Smithfield	Thaba Nchu	Theunissen	Trompsburg
Venterburg	Vilj oonskroon	Virginia	Vrede	Vredefort
Welkom	Wepener	Wesselsbron	Wietsieshoek	Winburg
Zastron				

NORTHWEST PROVINCE					
Bafokeng	Bloemhof	Brits	Christiana	Coligny	
Delareyville	Ditsobotla	Ganyesa	Hartswater	Klerksdorp	
Koster	Kudumane	Lichtenburg	Madikwe	Mankwe	
Marico	Molopo	Moretele	Potchestroom	Rustenburg	
Schweizer	Reneke	Swartruggens	Taung	Ventersdorp	
Vryburg	Wolmaransstad				

GAUTENG PROVINCE					
Alberton	Benoni	Boksburg	Brakpan	Bronkhorstspruit	
Cullinan	Germiston	Heidelberg	Johannesburg	Kempton Park	
Krugersdorp	Nigel	Oberhoizer	Pretoria	Randburg	
Randfontein	Roodepoort	Soshanguve	Springs	Vanderbijipark	
Vereeniging	Westonaria	Wonderboom			





MPUMALANGA PROVINCE					
Amersfoort	Belfast	Bronkhorspruit	Carolina	Cullinan	
Ermelo	Lydenburg	Middelburg	Moutjana	Moutse	
Standerton	Volksrust	Witbank			

LIMPOPO PROVINCE					
Bochum	Dzanani	Ellisras	Groblersdal	Habamoopo	
Messina	Mokerong	Moretele	Nebo	Pietersburg	
Potgieterust	Sekhukuneland	Seshego	Soutspanberg	g Thabazimbi	
Thohoyandou	Vuwani	Warmbad	Waterberg		

### **KWAZULU PROVINCE**

Utrecht

Note: some magisterial districts contain both "coastal" and "inland" areas.





### **ANNEXURE B**

Requirements for Metal-free petrol - for implementation 1st January 2006

Property	Units	Limit	SANS 1598
			2006
Octane number, research		mm	95,9391
Aromatics	% (v/v)	max	42
Benzene	% (vlv)	max	3





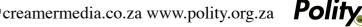
# ANNEXURE C

Requirements for Metal-containing petrol - for implementation

### 1st January 2006

Property	Units	Limit	SANS 464
			2006
			Coast: 95
Octane number, research		min	Inland 93
Metal Additives			
Manganese	Mg/L	max	18
Potassium	mg/L	max	10
Phosphorous	mg/L	max	14
Aromatics	% (vlv)		42
Benzene	% (vlv)	max	3

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### ANNEXURE D

### Requirements for Diesel - for implementation 1st Jan 2006

			SABS
Property	Unit	Limit	342
			2006
			2000
Sulphur Content:			
Standar	ppm	max	500
Low Sulphur Conten	ppm	max	50
Polycyclic Aromatic Hydrocarbons	% rn/m	max	11

