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## PRODUCT: MGO

#### **1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Nome do produto:	MGO
Código interno de identificação:	6430-3
Nome da empresa:	PETROBAHIA S/A
Endereço:	Avenida Garibaldi, 252 2° andar Federação Salvador-BA CEP 40210 750. Tel.: 71 3339-5900
Telefone de Emergência:	Em caso de emergência: 71 3006-0211

#### 2 - HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS:	Flammable liquid and vapour. Causes skin irritation. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
Product effects	
Adverse human health effects:	The product may irritate upper airways if inhaled and may cause narcotics effects. Causes irritation on skin and may cause slight irritation on eyes. The product may cause cancer. May cause death if aspired into the lungs.
Environmental effects:	The product may be hazardous to the environment in case of large spills.
Physical and chemical hazards:	Flammable liquid and vapour.
Specific hazards:	Flammable liquid. Containers may explode when heated. Whenheated, the liquid releases toxic and irritant fumes.
Main symptoms:	Redness and pain on skin. Cough, sore throat and breathing difficulty. Dizziness, nausea, headache, mental confusion, lossof consciousness.



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Classification of the chemical product:	Flammable liquids – Category 3
	Skin corrosion/irritation – Category 2
	Carcinogenicity – Category 2
	Specific target organ toxicity (single exposure) – Category 3
	Aspiration hazard – Category 1
Classification system adopted:	Adoption of Globally Harmonized System of Classification and Labelling of Chemicals (GHS), United Nations.
Adequate labeling elements:	FLAMMABLE LIQUID AND DANGEROUS FOR HUMAN HEALTH.
Adequate labeling elements:	
Pictograms	
Signal word:	DANGER
Hazard statements:	Flammable liquid and vapour. Causes skin irritation.
	Suspected of causing cancer.
	May cause respiratory irritation.
	May cause drowsinesss or dizziness.
	May be fatal if swallowed and enters airways



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Precautionary statements:	Keep away from heat/sparks/open flames/hot surfaces.
	No smoking.
	Keep container tightly closed.
	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Store in a well-ventilated place.
	If inhaled, remove victim to fresh air and keep at rest in a position
	comfortable for breathing.
	Do not get in eyes, on skin, or on clothing.
	Wear protective gloves/protective clothing/ eye protection/ face
	protection.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do.
	Continue rinsing.
	Avoid release to the environment.

## **3 - COMPOSITION/INFORMATION ON INGREDIENTS**

PETROLEUM SUBSTANCE				
Petroleum substance group:	Gas oilErro! Vínculo não válido.Gas oil streams and distillate fuels are complex petroleum mixtures, composed primarily of saturated (paraffinic and naphthenic) or aromatic hydrocarbons with carbon numbers ranging from C9 to C30 that boil between300 and 880ºF (≈150 and 471ºC).			
CAS Number:	68334-30-5			
Impurities that contribute to the		Component	Concentration (%)	CAS
hazard:		Sulfur compounds	Total sulfur concentrationl: 1,5% (p/p) max.	NA

#### 4 - FIRST AID MEASURES

Inhalation:	Remove the victim to fresh air. Monitor respiratory function. If there is breathing difficulty, provide oxygen. If necessary, give artificial respiration. Seek medical attention. Take this SDS.
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Skin contact:	Remove contaminated clothing and shoes. Wash affected areawith plenty of water for at least 15 minutes. Wash contaminated clothing and shoes before reuse. Seek medical attention. Take this SDS.
Eye contact:	Wash immediately with running water for at least 15 minutes, keeping the eyelids open. Remove contact lenses if present and easily removable. Seek medical attention. Take this SDS.
Ingestion:	Rinse mouth of victim with water. Give plenty of water to drink. DO NOT INDUCE VOMITING. Seek medical attention.Take this SDS.
Protection of first-aiders and/or special notes to a physician:	Avoid contact with this product while helping the victim; keep the victim warmed. In case of skin and/or eye contact, do not friction the affected area. Never give anything by mouth to an unconscious person. Symptomatic treatment should include, above all, measured of support as correction of hydro

# 5 - FIRST AID MEASURES

Suitable extinguishing media:	Dry chemical, alcohol resistant foam, carbon dioxide and mist of water.
Unsuitable extinguishing media:	Water jets. Water directly on the burning liquid.
Specific extinguishing methods:	Tanks and containers involved in the fire should be cold with water spray.
Specific hazards:	Vapours may spread to sources of ignition and provoke flames to retrocede. Closed containers may rupture violently whenexposed to fire or excessive heat. Risk of explosion in confined spaces, drainage and sewage systems. When heated may releasehydrogen sulfide.
Special equipment for the protection of fire-fighters:	Self-contained breathing apparatus (SCBA) operated in positivepressure mode and complete protective clothing.



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## **6 - ACCIDENTAL RELEASE MEASURES**

Personal precautions	
Removal of ignition sources:	Flammable product. Remove all sources of ignition. Prevent sparks or flames.
Prevention of inhalation, skin, eyeand mucous membrane contact:	Do not touch damage containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation, eye and skin contact. Use appropriate personal protective equipment as indicated in – Section 8.
Environmental precautions:	Do NOT let this chemical enter the environment (soil, waterways and groundwater).
Methods cleaning up	
Procedures to be adopted:	Collect the product and place the material in proper containers. Adsorb the product remaining with dry sand, earth, vermiculite or other inert material. Place the adsorbed material in proper containers and remove them to safe place.
Prevention of secondary hazards:	Do not discharge directly into the environment or into the sewer system. The dilution water from fire fighting can cause pollution.

# 7 - HANDLING AND STORAGE

Appropriate technical measures for handling	
Precautions for safe handling:	Handle in a ventilated area or with the general system of local exhaust ventilation. Avoid contact with incompatible materials. Do not smoke.
Prevention of user exposure:	Avoid contact with skin, eyes and clothing. Avoid breathing mist and vapours of the product. Use proper personal protective equipment as indicated in Section 8



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Hygiene measures:	Do not eat, drink or smoke when using this product. Wash hands before eating, drinking, smoking or going to the toilet. Take off all contaminated clothing and wash before reuse.				
Appropriate technical measure for storage	es				
Suitable storing conditions:	Keep only in original container, in a cool, dry, protected from direct sunlight and fire-proof. Keep container tightly closed. The floor of the storage room must be impermeable, non- oxidizing and with contention dikes to retain the product in case of leakage. Store in adequate storage tanks placed in containment basin to retain product in case of leakage. Engineering specifications should meet local regulations.				
Unsuitable storing conditions:	High temperatures. Ignition sources. Contact with incompatible materials.				
Packaging materials	Not specified.				

#### 8 - EXPOSURE CONTROL AND PERSONAL PROTECTION

# Specific control parameters Occupational exposure limits Component TLV – TWA (ACGIH) TLV – STEL (ACGIH) Diesel oil 100 mg/m³ Engineering control measures Provide mechanical ventilation or direct exhaustion to the external media. It is recommended safety shower and eye bath available near work site.



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Appropriate personal protective equipment			
Respiratory protection:	It is recommended to use a respirator for organic vapors for exposures above half of the TLV-TWA. In cases which exposure exceed tree times TLV-TWA values, use supplied air respirator (SCBA), full face- piece operated in positive pressure mode.		
Hand protection:	Protective gloves of PVC		
Eye protection:	Protective goggles with lateral protection		
Special precautions:	Avoid wearing contact lenses while using this product.		
Skin and body protection:	Suitable protective clothing		

#### 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown liquid
Odour:	Characteristic of hydrocarbons
pH:	Not applicable.
Melting point/freezing point:	Not available.
Boiling point, initial boiling and boiling range:	Not available.
Flash point:	60 ºC (closed cup)
Upper/ Lower flammability or explosive limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Density/relative density:	0.8510
Solubility (ies):	Soluble in organic solvents. Not soluble in water.
n-octanol/water partition coefficient:	Log kow: 7.22 (estimated value)
Auto-ignition temperature:	Not available.



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Viscosity:	1,500 at 6,000 cSt at 40 °C; Method: ASTM – D-445		
Decomposition temperature:	Not available		
Odour threshold:	Not available		
Distillation range:	Not available		

# **10 - STABILITY AND REACTIVITY**

Chemical stability:	Stable under normal conditions of storage and handling. Polymerization will not occur.	
Incompatible materials:	Não disponível.	
Hazardous decomposition products:	Light and heavy hydrocarbons and coke. When heated may release hydrogen sulfide.	

# **11 - TOXICOLOGICAL INFORMATION**

Acute toxicity:	The product may irritate upper airways if inhaled causingcough, sore throat and breathing difficulty. As a possible CNS depressor may cause headache, nausea, dizziness, mental confusion and even loss of consciousness. Causes irritation on skin with redness and pain. May cause slight irritation on eyes. May cause chemical pneumonitis if aspired. May cause death if ingest or inhaled. LD <sub>50</sub> (oral, rat): > 5000 mg/kg LD <sub>50</sub> (skin,rabbit): > 3000 mg/kg
Chronic toxicity:	Prolonged or repeated skin contact may cause dermatitis
Specific effects:	Carcinogenicity: Suspected human carcinogens.



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# **12 - ECOLOGICAL INFORMATION**

Ecotoxicity	In case of large spills the product may be hazardous to aquatic organisms due to possible formation of a film product on the surface water which can diminish dissolved oxygen levels.
Persistence and degradability:	It is expected low degradation and high persistence.
Bioaccumulative potential:	It is expected bioaccumulative potential. Log kow: 7.22 (estimated value)

# 13 - CONSIDERAÇÕES SOBRE TRATAMENTO E DISPOSIÇÃO

#### Recommended methods for safe and environmentally preferred disposal

Chemical product waste:	Must be disposed as hazardous waste according to local regulations. The treatment and disposal should be evaluated specifically for each product. Federal, state and local laws should be consulted.
Chemical product residues:	Keep the product residues in their original containers and properly sealed inside metallic drums according to legislation. Disposal should be carried out as established for the product, recommending routes of co-processing in cement kilns and incineration.
Contaminated containers:	Do not reuse empty containers. These may contain residues of the product and must be kept closed and sent for proper disposal. In this case, it is recommended shipping routes for recovery or incineration of drums.



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#### **14 - TRANSPORTATION**

International regulations	
Land:	UN - "United Nations" Recommendations on the TRANSPORT OF DANGEROUSGOODS. Model Regulations, 16 <sup>th</sup> Edition, 2009.
Sea:	IMO - "International Maritime Organization" International Maritime Dangerous Goods Code (IMDG Code) - Incorporating Amendment 34-08; 2008 Edition.
Air:	IATA - "International Air Transport Association" Dangerous Goods Regulation (DGR) – 51 <sup>st</sup> Edition, 2010.
UN classification number:	1202
UN proper shipping name:	GAS OIL.
UN Classification:	3
Packing group:	III

# **15 – REGULATORY INFORMATION**

Regulatory:Convention concerning Safety in the use of Chemicals at Work (Convention 170) -<br/>International Labour Organization, 1990.International Organization for Standardization - ISO11014:2009.

## **16 - OTHER INFORMATION**

This SDS was prepared based on current knowledge of the chemical and provides information on the protection, safety, health and the environment.

Advised that the handling of any chemical requires prior knowledge of its dangers by the User. It is for the user company product promotes the training of its employees and contractors about the possible risksfrom the product.



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#### Abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

**CAS** – Chemical Abstracts

ServiceLC<sub>50</sub> – Lethal

Concentration 50% LD<sub>50</sub> -

Lethal Dose 50%

**TLV** – Threshold Limit Value

TWA – Time Weighted Average

#### Bibliography:

[ACGIH] AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS. Available at: http://www.acgih.org/TLV/. Access in: May, 2011.

[ECB] EUROPEAN CHEMICALS BUREAU. Directive 67/548/EEC (substances) and Directive1999/45/EC (preparations). Available at: http://ecb.jrc.it/. Access in: May, 2011.

[EPI-USEPA] ESTIMATION PROGRAMS INTERFACE Suite - United States EnvironmentalProtection Agency. Software.

[HSDB] HAZARDOUS SUBSTANCES DATA BANK. Available at: http://toxnet.nlm.nih.gov/cgi-bin/sis/ htmlgen? HSDB. Access in: May, 2011.

[IARC] INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at: <a href="http://monographs.iarc.fr/ENG/Classification/index.php">http://monographs.iarc.fr/ENG/Classification/index.php</a>. Access in: May, 2011.

[IPCS] INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY – INCHEM. Available at: http://www.inchem.org/. Access in: May, 2011.

[IPIECA] INTERNATIONAL PETROLEUM INDUSTRY ENVIRONMENTAL CONSERVATION ASSOCIATION. Guidance on the application of Globally Harmonized System (GHS) criteria to petroleum substances. Version 1. June 17<sup>th</sup>, 2010. Available at: http:// www.ipieca.org/system/files/publications/ghs\_guidance\_17\_june\_2010.pdf. Access in: May, 2011.

[IUCLID] INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATA BASE.

[s.l.]: European chemical Bureau. Available at: http://ecb.jrc.ec.europa.eu. Access in: May, 2011.

[NIOSH] NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available at: http://www.cdc.gov/niosh/. Access in: May, 2011.



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[NITE-GHS JAPAN] NATIONAL INSTITUTE OF TECHNOLOGY AND EVALUATION. Available at: http://www.safe.nite.go.jp/english/ghs\_index.html. Access in: May, 2011.

[PETROLEUM HPV] PETROLEUM HIGH PRODUCTION VOLUME. Available at: http://www.petroleumhpv.org/pages/petroleumsubstances.html. Access in: May, 2011

[REACH] REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS. Commission Regulation (EC) No 1272/2008 of 16 December 2008 amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals.

[SIRETOX/INTERTOX] SISTEMA DE INFORMAÇÕES SOBRE RISCOS DE EXPOSIÇÃO QUÍMICA. Available at: http://www.intertox.com.br. Access in: May, 2011.

[TOXNET] TOXICOLOGY DATA NETWORKING. ChemIDplus Lite. Available at: http://chem.sis.nlm.nih.gov/. Access in: May, 2011.