



**Product: AVO 7+**

## **MATERIAL SAFETY DATA SHEET**

### **1. PREPARATION AND COMPANY IDENTIFICATION**

PRODUCT TRADE NAME:

**AVO 7+**

PRODUCT CODE: 1SP4

USE OR DESCRIPTION:

Multipurpose spray lubricant.

COMPANY IDENTIFICATION:

PETRONAS LUBRICANTS BELGIUM NV

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COMPETENT PERSON FOR SAFETY DATA OF PRODUCT:

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### **2. HAZARDS IDENTIFICATION**

Prolonged and repeated skin contact of product may cause skin dryness or cracking or other kind of irritation.

The product is extremely flammable.

Vapours of solvent may cause drowsiness and dizziness.

### **3. COMPOSITION AND INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENTS	EINECS n°	CAS n°	QUANTITY	SYMBOL	R-PHRASES
Propan-2-ol	200-661-7	67-63-0	3-5 %	Xi, F	11-36-67



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GPL (mixture of Butane, Iso-butane and Propane, EINECS n° 200-448-7 / 200-857-2 / 200-827-9)	Mixture	Mixture	25-30 %	F+	12
Kerosene (petroleum)	232-366-4	8008-20-6	>50 %	Xn	65-66

R-phrases and list of abbreviations: see heading 16.

## 4. FIRST AID MEASURES

### INGESTION:

Do not induce vomiting to avoid aspiration into the respiratory tracts. Obtain medical attention.

### EYE CONTACT:

Rinse thoroughly with plenty of water for at least 10 minutes keeping eyelids open. Obtain medical attention if any pain or redness develops or persists.

### SKIN CONTACT:

Remove contaminated clothes and shoes and rinse thoroughly with plenty of water and soap.

### INHALATION:

Expose affected person to fresh air and obtain medical attention if necessary.

## 5. FIRE-FIGHTING MEASURES

FLASH POINT: <math><21^{\circ}\text{C}</math> (ASTM D 92)

### EXTINGUISHING MEDIA:

This product is extremely flammable and its containers may burst: keep out of flame or other source of heat. In case of fire use foam, carbon dioxide, dry chemical powder and water mist.

Cool down with water the containers don't get involved in fire to avoid their possible explosion.

Avoid high pressure water jet. Use water jet only to cool down surfaces exposed to fire.

### EXPOSURE SPECIAL RISKS:

Don't breathe combustion fumes: fire can form harmful compounds.

### PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Protective clothing complete with autobreathing feature.

### COMBUSTION PRODUCTS:

Oxides of carbon, compounds of sulphur, nitrogen and products of incomplete combustion.



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### 6. ACCIDENTAL RELEASE MEASURES

#### ENVIRONMENTAL PRECAUTION:

Prevent the material from entering soil, sewers and water courses. Contact the appropriate authorities if necessary.

#### SPILLAGES:

In case of large spills dike, absorb and shovel up into suitable containers for disposal. Contain small spills with absorbent material. Put dirty material in suitable container. Avoid flame and/or spark near leak and produced waste. Dispose of dirty material in accordance with local or national regulations.

#### PERSONAL PRECAUTIONS:

Don't smoke during recovery of product. Avoid contact with skin and eyes by wearing appropriate protective clothing. Avoid to breathe fumes and aerosols.

Surfaces on which the product has been spilled may become slippery.

### 7. HANDLING AND STORAGE

#### HANDLING:

Avoid frequent and prolonged skin contact and contact with eyes. Provide adequate ventilation to avoid mist or aerosol. Do not smoke and do not use spare flames during use of product. Do not spray on anything incandescent. Practice reasonable personal cleanliness.

#### STORAGE:

Store under cover in the original container securely closed away from heat and sources of ignition, spare flames and direct sun-rays. Do not store in the open air. Assure a correct ventilation of premises and the control of possible leak. Avoid the accumulation of electrostatic charges.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### OCCUPATIONAL EXPOSURE LIMITS:

The recommended exposure limits are:

CHEMICAL AGENT		LIMIT	
oil mists	TLV/TWA (8 h)	5	mg/m3 ACGIH
oil mists	TLV/STEL	10	mg/m3 ACGIH
butane	TLV/TWA (8 h)	1900	mg/m3 (national legislation)
propane	TLV/TWA (8 h)	1800	mg/m3 (national legislation)
iso-butane	TLV/TWA (8 h)	2350	mg/m3 (MAK)
hydrocarbon solvents	VLEP	1200	mg/m3 (CEFIC-HSPA)

#### TECHNICAL PRECAUTIONS:



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Avoid production and diffusion of mist and aerosol with utilization of localized ventilation/aspiration or other required precautions. If necessary, adopt all required precaution to avoid product immission in environment (e.g., blasting systems, catch basins, ...).

### RESPIRATORY PROTECTION:

None required under normal conditions of use. Use approved full face respirator with organic vapour filter cartridge if the recommended exposure limits are exceeded.

### HAND AND SKIN PROTECTION:

Wear suitable gloves in organic solvent-proof and oil-proof material (i.e. neoprene, nitrile). Gloves should be changed when they show wear. The kind of gloves and the term of use must be decided from employer with regard to processing and to allow for legislation on personal protection equipment and glove producer's indications. Wear gloves only with clean hands.

Wear suitable protective clothing (for further information, refer to CEN-EN 14605); change it immediately in case of large contamination and wash it before subsequent use.

Practice reasonable personal cleanliness.

### EYE PROTECTION:

Chemical goggles and face shield in case of oil splashes.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	VALUE	METHOD
SPECIFIC GRAVITY @ 15°C (WATER = 1)	0.71	
WATER SOLUBILITY	Insoluble	
FLASH POINT	<21°C	ASTM D 92

## 10. STABILITY AND REACTIVITY

### STABILITY:

The product is stable under normal conditions of use.

### CONDITIONS TO AVOID:

This product must be kept far from heat sources and spare flames. Avoid to leave the container to sunlight.

### MATERIALS TO AVOID:

Strong oxidizing agents, hard acids and bases.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon, compounds of sulphur and nitrogen.

## 11. TOXICOLOGICAL INFORMATION



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### INGESTION:

Unlike to cause harm if accidentally swallowed in small doses, though ingestion of large quantities may cause gastro-intestinal effects.

### INHALATION:

Inhalation of solvent may cause drowsiness and dizziness. Inhalation of mists and vapours generated at elevated temperatures may cause respiratory irritation, too.

### EYE CONTACT:

Contact may cause slight irritations.

### SKIN CONTACT:

Product is not an irritant, but prolonged or repeated contacts may cause irritations or dermatitis.

## 12. ECOLOGICAL INFORMATION

This product is not classified dangerous for the environment, but it is considered not readily biodegradable.

Some product components are dangerous to aquatic organisms and with long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

Prevent contamination of soil, drains and surface waters.

Do not discharge in sewers, tunnels or water courses. Dispose in accordance with local or national regulations via authorised person/licensed waste disposal contractor.

The used product is to be considered a special waste to be classified in accordance to Directives 75/442/EC (on wastes) and 91/689/EC (on hazardous waste) and related legislation.

## 14. TRANSPORT INFORMATION

UN n°	1950 - aerosol
ADR/RID: class	2
ADR/RID: label	5F
IMO/IMDG: class	2
IMO/IMDG: EmS	2.13
IMO/IMDG: pg	II



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ICAO/IATA: class 2.1

### 15. REGULATORY INFORMATION

Classification and labelling according to EC regulations:

SYMBOL:



INDICATIONS OF DANGER:  
EXTREMELY FLAMMABLE

CONTAINS:

RISK PHRASES:

- R 12 Extremely flammable.
- R 67 Vapours may cause drowsiness and dizziness.

SAFETY PHRASES:

- S 2 Keep out of the reach of children.
- S 3/7 Keep container tightly closed in a cool place.
- S 16 Keep away from sources of ignition - No smoking.
- S 23.1 Do not breathe fumes/vapour/spray.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 51 Use only in well-ventilated areas.

OTHER INDICATIONS:

Pressurized container. Protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on flames or anything incandescent. Keep away from any source of combustion. Do not smoke. Do not inhale directly or spray into the eyes.

OTHER ENFORCEABLE LEGISLATION:

Regulation (EC) No 1907/2006, with all National and European related legislations - concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Directives 89/391/EC, 89/654/EC, 89/655/EC, 89/656/EC, 90/269/EC, 90/270/EC, 90/394/EC, 90/679/EC and all following updates, together with its national realization, about improvement of worker safety and health

Directives 98/24/EC and all following updates, together with its national realization, about protection of worker safety and health against chemical agent risks



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Directive 1999/45/EC and all following updates, together with its national realization, about classification, packaging and labelling of dangerous preparations

Directive 2001/59/EC and all following updates, together with its national realization, about classification, packaging and labelling of dangerous substances

Directive 2001/58/EC and all following updates, together with its national realization, about safety data sheets

Directive 2004/73/EC (29th adjustment) and all following updates, together with its national realization, about classification, packaging and labelling of dangerous substances

Directives 1975/324/EC, 1994/1/EC and all following updates, together with its national realization, about aerosol

Directive 1991/156/EC and all following updates, together with national waste legislation

EC directives and national environment protection legislation (air, water and soil)

## 16. OTHER INFORMATION

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extractables according to IP 346 method, and are therefore not classified as carcinogen according to EC/94/69 Directive, L note (21st adjustment to EC/67/548 Directive).

About naphtha, it is possible to apply H and P note of EC/67/548 Directive and following.

Sheet complies with the criteria of EC/91/155, EC/99/45, EC/2001/58, EC/2002/59 and EC/2004/73 Directives and following, as well as with Annex II of REACH.

This product must not be used in applications other than recommended without first seeking the advice of the Technical Department.

As regard as the previous version this sheet hasn't been changed.

Caption about heading 3, R-phrases:

R 11 Highly flammable.

R 12 Extremely flammable.

R 36 Irritating to eyes.

R 65 Harmful: may cause lung damage if swallowed.

R 66 Repeated exposure may cause skin dryness or cracking.



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R 67 Vapours may cause drowsiness and dizziness.

List of abbreviations used:

N.A. Not applicable

N.D. Not available

This product must be stored, handled and used according to correct industrial hygienic practices and in compliance with laws in force.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be considered as any guarantee of specific properties.