



## 1. Chemical product and company identification

<b>Product name</b>	CASTROL AVIATOR S 120
<b>MSDS#</b>	0000001546
<b>Historic MSDS#:</b>	None.
<b>Code</b>	0000001546
<b>Product use</b>	Lubrication of aircraft piston engines - to be used in accordance with engine manufacturers' guidelines.
<b>Manufacturer</b>	Air BP Lubricants Maple Plaza II - 1N Six Campus Drive Parsippany, NJ 07054 U.S.A.
<b>Supplier</b>	Air BP Lubricants Maple Plaza II - 1N Six Campus Drive Parsippany, NJ 07054 U.S.A.
<b>EMERGENCY HEALTH INFORMATION:</b>	1 (800) 447-8735
<b>EMERGENCY SPILL INFORMATION:</b>	1 (613) 996-6666 CANUTEC (Canada)
<b>OTHER PRODUCT INFORMATION</b>	1 (866) 4 BP - MSDS (866-427-6737 Toll Free - North America) email: bpcares@bp.com

## 2. Composition/information on ingredients

Ingredient name	CAS #	% by weight	Exposure limits	LC50/LD50
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7	60-100	<b>ACGIH (United States).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: OIL MIST, MINERAL STEL: 10 mg/m <sup>3</sup> 15 minute(s). Form: OIL MIST, MINERAL	Not available.
Proprietary performance additives	proprietary	1-5	None assigned.	Not available.

## 3. Hazards identification

<b>Physical state</b>	Liquid.
<b>Color</b>	Amber. Clear.
<b>Emergency overview</b>	Caution!  Slightly irritating to the skin. Slightly irritating to the eyes.  Avoid contact with skin and clothing. Wash thoroughly after handling.
<b>Routes of entry</b>	Skin contact. Eye contact. Inhalation. Ingestion.

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		<b>Language</b> ENGLISH ( ENGLISH )

## Potential Health Effects

<b>Eyes</b>	Slightly irritating to the eyes.
<b>Skin</b>	Slightly irritating to the skin.
<b>Inhalation</b>	Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.
<b>Ingestion</b>	Causes gastrointestinal irritation and diarrhea.

See toxicological Information (section 11)

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## 4. First aid measures

<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

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## 5. Fire-fighting measures

<b>Flammability of the product</b>	May be combustible at high temperature.
<b>Flash point</b>	296 °C (Open cup) Cleveland. ASTM D-92
<b>Products of combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), oxides of phosphorus.
<b>Unusual fire/explosion hazards</b>	None identified.  This material is not explosive as defined by established regulatory criteria.
<b>Fire fighting media and instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Protective clothing (fire)</b>	Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

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## 6. Accidental release measures

<b>Personal Precautions</b>	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).
<b>Environmental precautions and clean-up methods</b>	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.
<b>Personal protection in case of a large spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

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## 7. Handling and storage

<b>Handling</b>	Avoid breathing vapors or spray mists. Avoid contact with eyes. Avoid contact with skin. Wear suitable protective clothing. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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## 8. Exposure controls/personal protection

### Occupational exposure limits

DISTILLATES (PETROLEUM),  
HYDROTREATED HEAVY PARAFFINIC

#### ACGIH (United States).

TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: OIL MIST, MINERAL

STEL: 10 mg/m<sup>3</sup> 15 minute(s). Form: OIL MIST, MINERAL

Proprietary performance additives

None assigned.

### Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

### Hygiene measures

Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

### Personal protection

#### Eyes

Avoid contact with eyes. Chemical splash goggles.

#### Skin and Body

Avoid contact with skin. Wear suitable protective clothing.

#### Respiratory

None required; however, use of adequate ventilation is good industrial practice. If heated and ventilation is inadequate, use respirator which will protect against organic vapor.

#### Hands

Wear suitable gloves.

Consult local authorities for acceptable exposure limits.

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## 9. Physical and chemical properties

Physical state	Liquid.
pH	
Odor	Mild.
Odor threshold	Not available.
Color	Amber. Clear.
Boiling point / range	Not available.
Melting point / range	
Pour Point	-21 °C
Specific Gravity	<1
Density	<1 g/cm <sup>3</sup> at 20 °C
Vapor pressure	<0.001 kPa (<0.01 mm Hg) (at 20°C)
Vapor Density (Air = 1)	Not available.
Evaporation rate	Not available.
Solubility	Insoluble in cold water.
LogK <sub>ow</sub>	Not available.
Viscosity	Kinematic: 309 mm <sup>2</sup> /s (309 cSt) at 40°C Kinematic: 24.1 mm <sup>2</sup> /s (24.1 cSt) at 100°C
Viscosity Index	99

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## 10. Stability and reactivity

<b>Stability and Reactivity</b>	The product is stable.
<b>Conditions to avoid</b>	Keep away from heat, sparks and flame. Keep away from sources of ignition.
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents.
<b>Hazardous Decomposition Products</b>	Products of combustion: carbon oxides (CO, CO <sub>2</sub> ).
<b>Hazardous polymerization</b>	Will not occur.

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## 11. Toxicological information

<b>Acute toxicity</b>	Toxicity testing not conducted.
<b>Chronic toxicity</b>	
<b>Carcinogenic effects</b>	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or International Agency for Research on Cancer (IARC).
<b>Mutagenic effects</b>	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
<b>Reproductive effects</b>	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
<b>Teratogenic effects</b>	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.
<b>Other chronic toxicity data</b>	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.  Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.  Studies have shown that used motor oil causes skin tumors after a long latency period (over one year) in a low percentage of mice (below 10%.) when applied to the skin twice a week for their lifetimes. The material was not washed off between applications. A skin cancer risk may exist for people from prolonged or repeated contact with used motor oil in the absence of good personal hygiene.  In case of contact, wash exposed skin thoroughly with soap and water or use waterless hand cleaners to remove used motor oils from skin. Do not use gasoline, thinners, or solvents. Wear protective clothing and impervious gloves when working with used motor oils. Remove oil-soaked clothing, including shoes, and thoroughly clean and dry before reuse.  Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea.  At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs.

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## 12. Ecological information

<b>Ecotoxicity</b>	Ecological testing has not been conducted on this product by Castrol.
<b>Persistence/degradability</b>	Inherently biodegradable
<b>Mobility</b>	Spillages may penetrate the soil causing ground water contamination.
<b>Bioaccumulative potential</b>	This product is not expected to bioaccumulate through food chains in the environment.
<b>Other ecological information</b>	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## 13. Disposal considerations

### Waste information

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Consult your local or regional authorities.

## 14. Transport information

### International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	Not regulated.	Not regulated.	-----			
<b>TDG Classification</b>	Not regulated.	Not regulated.	-----			
<b>IMDG Classification</b>	Not regulated.	Not regulated.	-----			
<b>IATA Classification</b>	Not regulated.	Not regulated.	-----			

## 15. Regulatory information

### U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

### WHMIS (Canada)

Not controlled under WHMIS (Canada).

If listed, this product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations for those regulated products.

### Inventories

AUSTRALIAN INVENTORY (AICS): Not determined.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): Not determined.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): In compliance.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

## 16. Other information

### Label Requirements

Caution!

Slightly irritating to the skin.

Slightly irritating to the eyes.

### History

#### Date of issue

05/10/2004.

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**Date of previous issue**

04/30/2003.

**Prepared by**

Product Stewardship

**Notice to reader**

*NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.*