

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** F-34 / AVTUR/FSII  
**Synonym(s)** AVTUR/FSII (C143)(ALT FOR AVCAT AWAY FROM ALB) • JP-8 • NSN: 9130-66-027-9402  
002C0944 - PRODUCT CODE • AVTUR/FSII (FORMERLY) • F-34/AVTUR/FSII (FORMERLY)

### 1.2 Uses and uses advised against

**Use(s)** AVIATION TURBINE OIL • FUEL

### 1.3 Details of the supplier of the safety data sheet

**Supplier name** SHELL AVIATION AUSTRALIA PTY LTD  
**Address** Level 34, South Tower Collins St, Melbourne, VIC, Australia, 3000  
**Telephone** 1300 735 793  
**Fax** (03) 8823 4800  
**Email** vivaenergy-bus-centre-au@vivaenergy.com.au  
**Website** <http://www.vivaenergy.com.au>

### 1.4 Emergency telephone number(s)

**Emergency** 1800 033 111

### 1.5 Details of alternative supplier(s) of the product

**Supplier name:** VIVA ENERGY AUSTRALIA LTD (FORMERLY SHELL COMPANY OF AUSTRALIA)  
720 Bourke Street, Docklands, VIC, 3008  
Phone: (03) 8823 4444  
Emergency: (Emergency) 1800 651 818  
Email: [vivaenergy-bus-centre-au@vivaenergy.com.au](mailto:vivaenergy-bus-centre-au@vivaenergy.com.au)  
Website: <http://www.vivaenergy.com.au>

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**GHS Classification(s)** Flammable Liquids: Category 3  
Aspiration Hazard: Category 1  
Skin Corrosion/Irritation: Category 2  
Aquatic Toxicity (Chronic): Category 2

### 2.2 Label elements

**Signal word** DANGER

**Pictograms**



**Hazard statement(s)**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H411 Toxic to aquatic life with long lasting effects.

**Prevention statement(s)**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.

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- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P243 Take precautionary measures against static discharge.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response statement(s)**

- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P321 Specific treatment is advised - see first aid instructions.
- P331 Do NOT induce vomiting.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before re-use.
- P370 + P378 In case of fire: Use appropriate media for extinction.
- P391 Collect spillage.

**Storage statement(s)**

- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

**Disposal statement(s)**

- P501 Dispose of contents/container in accordance with relevant regulations.

**2.3 Other Hazards**

No information provided.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

**3.1 Substances / Mixtures**

Ingredient	CAS number	EC number	Content
KEROSENE	8008-20-6	232-366-4	<100%
KEROSINE, HYDRODESULPHURISED	64742-81-0	265-184-9	<100%
DIETHYLENE GLYCOL METHYL ETHER	111-77-3	203-906-6	<0.15%

**Ingredient notes** Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C16 range. Total aromatic hydrocarbons present are typically in the range of 10-20%v/v. Dyes and markers can be used to indicate tax status and prevent fraud.

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

- Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
- Inhalation** If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
- Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
- Ingestion** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
- First aid facilities** Eye wash facilities and safety shower should be available.

**4.2 Most important symptoms and effects, both acute and delayed**

No information provided.

**4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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**5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

**5.2 Special hazards arising from the substance or mixture**

Flammable. May evolve carbon oxides and hydrocarbons when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones, etc when handling. Earth containers when dispensing fluids. May evolve sulphur oxides when heated to decomposition.

**5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

**5.4 Hazchem code**

3Y

- 3 Normal Foam (protein based foam that is not alcohol resistant).
- Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

**6.2 Environmental precautions**

Prevent product from entering drains and waterways.

**6.3 Methods of cleaning up**

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

**6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

**7.2 Conditions for safe storage, including any incompatibilities**

Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate fire protection and ventilation systems.

**7.3 Specific end use(s)**

No information provided.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**8.1 Control parameters**

**Exposure standards**

Substance	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Kerosene (ACGIH)	SWA (AUS)	--	200	--	--

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**Biological limits**

No biological limit values have been entered for this product.

**8.2 Exposure controls**

**Engineering Controls**

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/ explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

**PPE**

- Eye/Face** Wear splash-proof goggles.
- Hand** Wear nitrile or neoprene gloves.
- Body** When using large quantities or where heavy contamination is likely, wear coveralls.
- Respiratory** Where an inhalation risk exists, wear an Air-line respirator or a Type A (Organic vapour) respirator.



**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	PALE STRAW COLOURED LIQUID
<b>Odour</b>	HYDROCARBON ODOUR
<b>Odour Threshold</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Melting Point</b>	NOT AVAILABLE
<b>Boiling Point</b>	150°C to 300°C
<b>Flash Point</b>	> 38°C (cc)
<b>Evaporation Rate</b>	NOT AVAILABLE
<b>Flammability</b>	FLAMMABLE
<b>Upper Explosion Limit</b>	6.0 %
<b>Lower Explosion Limit</b>	1.0 %
<b>Vapour Pressure</b>	< 0.1 hPa @ 20°C
<b>Vapour Density</b>	NOT AVAILABLE
<b>Solubility (water)</b>	INSOLUBLE
<b>Partition Coefficient</b>	2 to 6 (n-Octanol/Water)
<b>Autoignition Temperature</b>	> 220°C
<b>Decomposition Temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	1 cSt to 2 cSt @ 40°C
<b>Explosive Properties</b>	NOT AVAILABLE
<b>Oxidising Properties</b>	NOT AVAILABLE
<b>Specific Gravity</b>	0.775 to 0.84

**9.2 Other information**

No information provided.

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## 10. STABILITY AND REACTIVITY

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### 10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

### 10.2 Chemical stability

Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

### 10.6 Hazardous decomposition products

May evolve carbon oxides and hydrocarbons when heated to decomposition. May evolve sulphur oxides when heated to decomposition.

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## 11. TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Acute oral toxicity: > 2000 mg/kg. Acute dermal toxicity: > 2000 mg/kg. Acute inhalation toxicity: > 5 mg/L.
<b>Skin</b>	Contact may result in irritation, redness, rash and dermatitis.
<b>Eye</b>	Contact may result in irritation, lacrimation, pain and redness.
<b>Mutagenicity</b>	Not classified as a mutagen.
<b>Carcinogenicity</b>	Not classified as a carcinogen.
<b>Reproductive</b>	Not classified as a reproductive toxin.
<b>STOT - single exposure</b>	Over exposure may result in irritation of the nose and throat with coughing, as well as central nervous system (CNS) effects including headache, drowsiness and dizziness.
<b>STOT - repeated exposure</b>	Not classified as causing organ damage from repeated exposure. However, repeated exposure to some solvents have been reported to cause adverse effects to the central nervous system (CNS).
<b>Aspiration</b>	Aspiration into the lungs may cause chemical pneumonitis and pulmonary oedema.
<b>Sensitisation</b>	Not classified as causing skin or respiratory sensitisation.

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**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**12.2 Persistence and degradability**

The major components of this product are expected to be readily biodegradable.

**12.3 Bioaccumulative potential**

Contains components with the potential to bioaccumulate.

**12.4 Mobility in soil**

Floats on water. Contains volatile components. Evaporates within a day from water or soil surfaces. Large volumes may penetrate soil and could contaminate groundwater.

**12.5 Results of PBT and vPvB assessment**

No information provided.

**12.6 Other adverse effects**

No information provided.

**13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Waste disposal** Dispose of by controlled incineration, by licensed or competent personnel. Contact the manufacturer/supplier for additional information (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**

**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**



	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
<b>14.1 UN number</b>	1863	1863	1863
<b>14.2 UN proper shipping name</b>	FUEL, AVIATION, TURBINE ENGINE		
<b>14.3 Transport hazard classes</b>			
<b>DG Class</b>	3	3	3
<b>Subsidiary risk(s)</b>	None Allocated	-	-
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>		Marine Pollutant	
<b>14.6 Special precautions for user</b>			
<b>Hazchem Code</b>	3Y		
<b>EMS</b>		F-E, S-E	

**15. REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Poison schedule** Classified as a Schedule 5 Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

<b>Product name</b>	<b>F-34 / AVTUR/FSII</b>	
<b>Classifications</b>	F - Flammable N - Dangerous for the environment Xi - Irritant Xn - Harmful	
<b>Risk phrases</b>	R10:	Flammable.
	R38:	Irritating to skin.
	R51/53:	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
	R65:	Harmful: May cause lung damage if swallowed.
<b>Safety phrases</b>	S2:	Keep out of reach of children.
	S23:	Do not breathe gas/fumes/vapour/spray (where applicable).
	S24:	Avoid contact with skin.
	S29:	Do not empty into drains.
	S61:	Avoid release to the environment. Refer to special instructions/safety data sheets.
	S62:	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
<b>Inventory listing(s)</b>	<b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b> All components are listed on AICS, or are exempt.	

**15.2 Chemical safety assessment**

No information provided.

**16. OTHER INFORMATION**

**Additional information** WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

WORKPLACE CONTROLS AND PRACTICES: Unless a less toxic chemical can be substituted for a hazardous substance, ENGINEERING CONTROLS are the most effective way of reducing exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Isolating operations can also reduce exposure. Using respirators or protective equipment is less effective than the controls mentioned above, but is sometimes necessary.

HEALTH EFFECTS FROM EXPOSURE:  
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:  
The recommendation for protective equipment contained within this report is provided as a guide only.

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Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report Status**

This ChemAlert report has been independently compiled by RMT's scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

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Product name **F-34 / AVTUR/FSII**

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**End of Report**