

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product Identifier

Product Code A20-8949
Product name HFO Oil

Recommended use of the chemical and restrictions on use

Synonyms N/A

Supplier's details

Recommended use Industrial Use Only.
Uses advised against No information available

Details of the Supplier of the Safety Data Sheet

JAS Oceania PTY LTD
54 -58 Lille Crescent, Tullamrine, VIC 3043
Ph: 9317 2600 Fax: 9317 2690

Emergency Telephone Number

NSW Poisons Information Centre - 13 11 26
Transport Emergency – 13 15 55 (or (02) 9995 5555 from outside NSW).

2. Hazards Identification

Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

EMERGENCY OVERVIEW

Signal Word

Not Hazardous

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance clear, pale yellow liquid

Physical State Liquid

Odor Characteristic

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

Unknown Acute Toxicity

100 percent of the mixture consists of ingredient(s) of unknown acute toxicity

3. Composition/information on Ingredients

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

4. First aid measures

First aid measures for different exposure routes

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash skin with soap and water.
INHALATION	Move to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects, acute and delayed

Main Symptoms No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Keep away from heat and sources of ignition.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with the skin and the eyes. Use personal protective equipment. For personal protection see section 8. Ensure adequate ventilation.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

7. Handling and Storage

Precautions for Safe Handling**Advice on safe handling**

Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Provide appropriate exhaust ventilation at places where dust is formed. Do not eat, drink or smoke when using this product. Use

personal protection recommended in Section 8.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

Incompatible Products None known based on information supplied.

8. Exposure Controls/Personal Protection

Control Parameters

Exposure guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Exposure Controls

Engineering Measures Showers
Eyewash stations
Ventilation systems. Apply technical measures to comply with the occupational exposure limits. Process enclosure and/or ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear: Face-shield. Goggles.

Skin and Body Protection Skin and Body Protection. Wear protective gloves and protective clothing. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures Wear personal protective equipment.

9. Physical and Chemical Properties

Physical and Chemical Properties

Physical State	Liquid	Odor	Characteristic
Appearance	clear, pale yellow liquid		
odor threshold	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	No information available	
melting point		N/A
Boiling point/boiling range	> 250 °C / 482 °F	
Flash Point	> 230 °C / > 446 °F	
Evaporation Rate VALUE	No information available	
flammability (solid, gas)	no data available	no data available
Flammability Limits in Air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	No information available	N/A
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition Temperature	No Data Available	N/A
decomposition temperature	No information available	
Kinematic viscosity	No Data Available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

softening point	No information available
Molecular Weight	
VOC Content(%)	No information available.
density	No information available

10. Stability and Reactivity**Reactivity**

no data available

Chemical Stability

Stable under recommended storage conditions.

Hazardous Reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight.

incompatible materials

None known based on information supplied.

Hazardous decomposition products

May emit toxic fumes under fire conditions.

11. Toxicological Information**Information on Likely Routes of Exposure**

Product information	Product does not present an acute toxicity hazard based on known or supplied information
INHALATION	Avoid breathing vapors or mists.
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Ingestion	Not an expected route of exposure. Do NOT taste or swallow.

Information on Toxicological Effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive Toxicity	No information available.
Specific target organ systemic toxicity (single exposure)	No information available.
Specific target organ systemic toxicity (repeated exposure)	No information available.
Aspiration Hazard	No information available.

Numerical Measures of Toxicity - Product information

Unknown Acute Toxicity	100 percent of the mixture consists of ingredient(s) of unknown acute toxicity
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12. Ecological Information**ecotoxicity**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available

13. Disposal Considerations**Waste treatment****Waste Disposal Methods**

Should not be released into the environment. Dispose of in accordance with local regulations. This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261).

Contaminated Packaging

Do not re-use empty containers. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION**DOT****Description**

NOT REGULATED

MEX**IATA****Description**

NOT REGULATED

IMDG**Description**

NOT REGULATED

RID**ADN****15. Regulatory Information****International Inventories**

TSCA	Listed
EINECS/ELINCS	Listed
DSL	Listed
NDSL	Not Determined
PICCS	Listed
ENCS	Listed
IECSC	Listed
AICS	Listed
KECL	Listed
NZIoC	Not Determined

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

REACH registration number Keystone has taken all relative steps to ensure REACH-Compliance. Please contact us with any REACH-Related questions at REACH@Keystone-Europe.CO.UK

RESTRICTIONS - REACH TITLE VIII No information available

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	NO.
Chronic health hazard	NO.
Fire hazard	NO.
Sudden Release of Pressure Hazard	NO.
Reactive Hazard	NO.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

International regulations

Mexico - Grade Slight risk, Grade 1.

CANADA

WHMIS Note

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

HMIS	Health Hazard 1	Flammability 1	Physical hazard 0	PERSONAL PROTECTION H
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16. Other Information

Revision Date 08/08/2016

Revision note No information available.

Restrictions on use No information available.

Contact Information Website WWW.BRIGHTSOL.COM.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Material Safety Data Sheet