

Material Safety Data Sheet



Oil Standard Agilent Part Number 8500-8214

1. Product and company identification

Product name : Oil Standard Agilent Part Number 8500-8214
Part No. : 8500-8214
Manufacturer / Supplier : Agilent Technologies, Inc.
Logistics Center - Americas
500 Ships Landing Way
New Castle, Delaware 19720
Emergency telephone number : 1-302-633-8777
1-877-4 Agilent (Information Telephone Number)

2. Hazards identification

Physical state : Liquid.
Odor : Gasoline [Strong]
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview-Signal Word : CAUTION !
Emergency overview-Label Statement : COMBUSTIBLE LIQUID AND VAPOR. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.
Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Routes of entry : Not applicable.
Potential acute health effects
Eyes : May cause eye irritation.
Skin : May cause skin irritation.
Inhalation : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.
Medical conditions aggravated by over-exposure : Repeated or prolonged exposure to the substance can produce target organs damage.
Over-exposure signs/symptoms : Not applicable.
See toxicological information (section 11)

3. Composition/information on ingredients

United States

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Gas Oil - c20-40	178603-65-1	0 - 100
Gas Oil c10-25	445411-73-4	0 - 100
Gas Oils c10-25	178603-63-9	0 - 100
Gas Oils c25-55	178603-66-2	0 - 100
Gas Oils c15-30	178603-64-0	0 - 100
Fuel Oil No. 2	68476-30-2	0 - 100
Fuel Oil No. 4	68476-31-3	0 - 100
Petroleum	8002-05-9	0 - 100

<u>Name</u>	<u>CAS number</u>	<u>%</u>
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3. Composition/information on ingredients

Gas Oil - c20-40	178603-65-1	0 - 100
Gas Oil c10-25	445411-73-4	0 - 100
Gas Oils c10-25	178603-63-9	0 - 100
Gas Oils c25-55	178603-66-2	0 - 100
Gas Oils c15-30	178603-64-0	0 - 100
Fuel Oil No. 2	68476-30-2	0 - 100
Fuel Oil No. 4	68476-31-3	0 - 100
Petroleum	8002-05-9	0 - 100

Mexico

Name	CAS number	UN number	%	IDLH	H	Classification		
						F	R	Special
Gas Oil - c20-40	178603-65-1	Not available.	0 - 100	-	0	0	0	
Gas Oil c10-25	445411-73-4	Not available.	0 - 100	-	0	0	0	
Gas Oils c10-25	178603-63-9	Not available.	0 - 100	-	0	0	0	
Gas Oils c25-55	178603-66-2	Not available.	0 - 100	-	0	0	0	
Gas Oils c15-30	178603-64-0	Not available.	0 - 100	-	0	0	0	
Fuel Oil No. 2	68476-30-2	Not available.	0 - 100	-	0	2	0	
Fuel Oil No. 4	68476-31-3	UN1993	0 - 100	-	0	1	0	
Petroleum	8002-05-9	UN1993	0 - 100	1100 ppm	0	3	0	

Use of the substance/preparation : Analytical chemistry. Research.
5 ml

4. First aid measures

- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if adverse health effects persist or are severe.
- Skin contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if adverse health effects persist or are severe.
- Inhalation** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if adverse health effects persist or are severe.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if adverse health effects persist or are severe.
- Protection of first-aiders** : Not applicable.
- Notes to physician** : Not available.

5. Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : Decomposition products may include the following materials:
carbon oxides

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards - fire** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special exposure hazards - Explosibility** : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

5 . Fire-fighting measures

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special remarks on fire hazards** : Not available.
- Special remarks on explosion hazards** : Not available.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Product name

Exposure limits

United States

fuel oil no. 2

ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons

TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

fuel oil no. 4

ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons

TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

petroleum

NIOSH REL (United States, 12/2001).

CEIL: 1800 mg/m³ 15 minute(s).

TWA: 350 mg/m³ 10 hour(s).

Canada

8 . Exposure controls/personal protection

- fuel oil no. 2 **ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons**
TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons
- fuel oil no. 4 **ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons**
TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

Mexico

- fuel oil no. 2 **ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons**
TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons
- fuel oil no. 4 **ACGIH TLV (United States, 1/2007). Skin Notes: Measured as total hydrocarbons**
TWA: 100 mg/m³, (Measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protection

- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Chemical resistant protective gloves and clothing are recommended. The choice of protective gloves or clothing must be based on chemical resistance and other use requirements. Generally, BUNA-N offers acceptable chemical resistance. Individuals who are acutely and specifically sensitive to this chemical may require additional protective clothing.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Other protection** : Not available.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Open cup: >56°C (132.8°F).
- Auto-ignition temperature** : Lowest known value: 209.85 to 406.85°C (409.7 to 764.3°F) (fuel oil no. 4).
- Flammable limits** : Not available.
- Color** : Amber.
- Odor** : Gasoline [Strong]
- pH** : Not available.
- Boiling/condensation point** : Lowest known value: 30 to 237.78°C (86 to 460°F) (petroleum). Weighted average: 225.03°C (437.1°F)

9 . Physical and chemical properties

Melting/freezing point	: May start to solidify at the following temperature: -72.78°C (-99°F) This is based on data for the following ingredient: petroleum.
Relative density	: Weighted average: 0.81 (Water = 1)
Vapor pressure	: <0.5 kPa (<3.8 mm Hg) (at 20°C)
Vapor density	: Not available.
Evaporation rate	: Not available.
Solubility	: Not available.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 .Toxicological information

United States

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
fuel oil no. 2	LD50 Dermal LD50 Oral	Rabbit Rat	4720 uL/kg 12 g/kg	- -

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
fuel oil no. 2	A3	3	-	-	-	-
fuel oil no. 4	A3	2B	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Canada

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
fuel oil no. 2	LD50 Dermal LD50 Oral	Rabbit Rat	4720 uL/kg 12 g/kg	- -

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
fuel oil no. 2	A3	3	-	-	-	-
fuel oil no. 4	A3	2B	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

11 .Toxicological information

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Mexico

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
fuel oil no. 2	LD50 Dermal	Rabbit	4720 uL/kg	-
	LD50 Oral	Rat	12 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
fuel oil no. 2	A3	3	-	-	-	-
fuel oil no. 4	A3	2B	-	-	-	-

Mutagenicity

Teratogenicity

Reproductive toxicity

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.


RCRA classification : **Code:** D001

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.




The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	3316	Chemical kits	9	III		Packaging instruction Passenger aircraft Quantity limitation: 10 kg Packaging instructions: 173.161 Cargo aircraft Quantity limitation: 10 kg

14 . Transport information

						Remarks Small Quantity
TDG Classification	3316	Chemical Kit	9	III		-
Mexico Classification	3316	Chemical Kit	9	III		-
IATA Class	3316	Chemical Kit	9	III		Passenger and Cargo Aircraft Quantity limitation: 10 kg Packaging instructions: 915 Cargo Aircraft Only Quantity limitation: 10 kg Packaging instructions: 915 Remarks Excepted Quantity

PG* : Packing group

15 . Regulatory information**United States****HCS Classification**

: Combustible liquid
Carcinogen
Target organ effects

Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

U.S. Federal regulations

: **United States inventory (TSCA 8b):** All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: fuel oil no. 2; fuel oil no. 4; petroleum

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: fuel oil no. 2: Fire hazard, Immediate (acute) health hazard; fuel oil no. 4: Fire hazard, Delayed (chronic) health hazard; petroleum: Fire hazard, Immediate (acute) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations

: **Connecticut Carcinogen Reporting:** None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.

Louisiana Spill: None of the components are listed.

15 . Regulatory information

Massachusetts Spill: None of the components are listed.

Massachusetts Substances: The following components are listed: PETROLEUM CRUDE

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: The following components are listed: FUEL OIL; FUEL OIL;MOTOR FUEL, n.o.s.

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New York Acutely Hazardous Substances: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed: PETROLEUM

Rhode Island Hazardous Substances: None of the components are listed.

Canada

WHMIS (Canada)

: Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

Class D-2A: Material causing other toxic effects (Very toxic).

CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the components are listed.

Alberta Designated Substances: None of the components are listed.

Ontario Designated Substances: None of the components are listed.

Quebec Designated Substances: None of the components are listed.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Mexico

Classification

Health : 0

Flammability : 2

Reactivity : 0

EU regulations

Hazard symbol or symbols : Toxic

Risk phrases : R45- May cause cancer.

Safety phrases : S53- Avoid exposure - obtain special instructions before use.

International regulations

International lists : **Australia inventory (AICS):** Not determined.

China inventory (IECSC): Not determined.

Korea inventory (KECI): Not determined.

Philippines inventory (PICCS): Not determined.

Japan inventory (ENCS): Not determined.

16 . Other information

Label requirements

: COMBUSTIBLE LIQUID AND VAPOR. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Date of printing : 9/19/2007.

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Version : 1

Notice to reader

16 . Other information

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Indicates information that has changed from previously issued version.