

SAFETY DATA SHEET

GAS OIL NO. 2 AND NO. 3



DENV00000038

Version 1.0

Revision Date 2015/05/29

Print Date 2019/12/18

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : GAS OIL NO. 2 AND NO. 3

Synonyms : Atmospheric/Vacuum Gas Oil; Atmospheric Sour Gas Oil; 0539 - Sour Vacuum Gas Oil; 0592 - Gas Oil No.2, No.3

Manufacturer or supplier's details
Suncor Energy (U.S.A.)
5801 Brighton Blvd.
Commerce City Colorado 80022
United States

Emergency telephone number : Suncor Energy: +1 403-296-3000;
CHEMTREC Transport Emergency: 1-800-424-9300 or 1-703-527-3887 (call collect)

Recommended use of the chemical and restrictions on use

Recommended use : Intermediate stream

Prepared by : Product Safety: +1 905-804-4752

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	Brown-green
Odour	Aromatic hydrocarbon.

GHS Classification

Flammable liquids : Category 4

Acute toxicity (Inhalation) : Category 3

Skin irritation : Category 2

Skin sensitisation : Category 1

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1B

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure : Category 2 (Liver, Thymus, Bone marrow, Blood, spleen)

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Aspiration hazard : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H340 May cause genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs (Liver, Thymus, Bone marrow, Blood, spleen) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ eye protection/ face protection.
P281 Use personal protective equipment as required.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:

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P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

- Primary Routes of Entry : Skin contact
- Target Organs : Blood
Liver
Bone marrow
Thymus
spleen
- Inhalation : Inhalation may cause central nervous system effects.
May cause respiratory tract irritation.
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
- Skin : Causes skin irritation.
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
- Eyes : May cause eye irritation.
- Ingestion : Aspiration hazard if swallowed - can enter lungs and cause damage.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
- Chronic Exposure : This product may contain polycyclic aromatic hydrocarbons (PAH's) which have been known to produce a phototoxic reaction when contaminated skin is exposed to sunlight. The effect is similar in appearance to an exaggerated sunburn and is temporary in duration if exposure is discontinued. Materials containing OSHA-defined coal tar pitch volatiles which contain polycyclic aromatic hydrocarbons are known to be carcinogenic to humans.
- Aggravated Medical Condition : None known.

Carcinogenicity:

IARC

Group 2A: Probably carcinogenic to humans

Gas oils, petroleum, light vacuum 64741-58-8

Gas oils, petroleum, heavy vacuum 64741-57-7

Gas oils, petroleum, straight-run 64741-43-1

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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- OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
- NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Gas oils (petroleum), light vacuum	64741-58-8	90 - 100 %
gas oils (petroleum), heavy vacuum	64741-57-7	90 - 100 %
Gas oils (petroleum), straight-run	64741-43-1	90 - 100 %
distillates (petroleum), vacuum	70592-78-8	90 - 100 %
Polycyclicaromatic hydrocarbons	130498-29-2	< 0.5 %

Coal Tar Pitch Volatiles (as benzene soluble aerosol) standard applies

SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Wash clothing before reuse.
Seek medical advice.
- In case of eye contact : Remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.
- If swallowed : Rinse mouth with water.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.
Seek medical advice.
- Most important symptoms : First aider needs to protect himself.

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and effects, both acute and delayed

Notes to physician : Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg or 350 mL for an average adult.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Dry chemical
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : No information available.
- Specific hazards during firefighting : Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : Carbon oxides (CO, CO₂), smoke and irritating vapours as products of incomplete combustion.
- Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
Water spray may be used to flush spills away from exposures.
- Special protective equipment for firefighters : Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Material can create slippery conditions.
- Environmental precautions : Do not allow uncontrolled discharge of product into the environment.
- Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.
Remove all sources of ignition.
Ensure adequate ventilation.
Recover free liquid for reuse or reclamation.
Dike spill area and add absorbent earth or sawdust to spilled liquid.
Prevent runoff from entering drains, storm sewers, and streams.
Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin, eyes and clothing.
Do not ingest.
Keep away from heat and sources of ignition.
Keep container closed when not in use.
- Conditions for safe storage : Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in a dry, cool and well-ventilated place.
Keep in properly labelled containers.
To maintain product quality, do not store in heat or direct sunlight.
Store in accordance with NFPA recommendations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
pitch, coal tar, high-temp.	65996-93-2	TWA	0.2 mg/m ³	ACGIH

- Engineering measures** : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.

Personal protective equipment

- Respiratory protection : 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.
Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure and published respirator selection factors.
- Filter type : Wear a NIOSH-approved respirator/breathing apparatus in situations where there may be potential for airborne exposure.
- Hand protection
Material : neoprene, nitrile. Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should

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	be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
Remarks	: 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. When handling hot material, use heat resistant gloves.
Eye protection	: Wear face-shield if splashing hazard is likely. If liquid handled, wear goggles and face shield.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: Brown-green
Odour	: Aromatic hydrocarbon.
Odour Threshold	: No data available
pH	: No data available
Melting point	: No data available
Boiling point/boiling range	: 204 - 593 °C (399 - 1099 °F)
Flash point	: 66 °C (151 °F) Method: Tag closed cup
Auto-Ignition Temperature	: No data available
Evaporation rate	: No data available
Flammability	: Combustible, avoid open flames, sparks, static discharge and intense heat.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: (38 °C / 100 °F) negligible
Relative vapour density	: > 1Air = 1
Relative density	: 0.9Water = 1
Density	: No data available

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Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Containers may explode in heat of fire.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Hazardous polymerisation does not occur. Stable under normal conditions.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Reactive with oxidising agents.

Hazardous decomposition products : May release COx, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact

Acute toxicity

Product:

Acute oral toxicity Remarks: No data available

Acute inhalation toxicity Remarks: No data available

Acute dermal toxicity Remarks: No data available

Components:

Gas oils (petroleum), light vacuum:

Acute inhalation toxicity LC50 (Rat): 4.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

gas oils (petroleum), heavy vacuum:

Acute inhalation toxicity LC50 (Rat): 4.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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Skin corrosion/irritation

Product:

Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Remarks: No data available

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

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Mobility in soil

No data available

Other adverse effects

No data available

Product:

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.
The product should not be allowed to enter drains, water courses or the soil.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Large empty containers such as drums, should be returned to the distributor or a drum reconditioner.

SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA-DGR

UN/ID No. : 1202
Proper shipping name : Gas oil
Class : 3
Packing group : III
Labels : 3
Packing instruction (cargo aircraft) : 366

IMDG-Code

UN number : 1202
Proper shipping name : GAS OIL
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

49 CFR

UN/ID/NA number : 1202

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Proper shipping name : Gas oil
Class : 3
Packing group : III
Labels : 3
ERG Code : 128
Marine pollutant : no

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

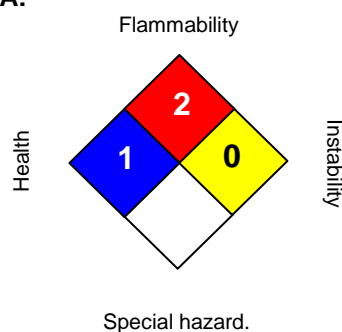
The components of this product are reported in the following inventories:

TSCA not determined

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

For Copy of (M)SDS : For Product Safety Information: 1 905-804-4752

Prepared by : Product Safety: +1 905-804-4752

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