

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : DF-2065

1.2. Recommended use and restrictions on use

Use of the substance/mixture : De-Foamer

1.3. Supplier

Chemical Consultants Inc.
1600 Ratcliff Drive
Gillette, WY 82716 - United States
T 307-686-2141 - F 307-686-1106
www.chemicalconsultants.com

1.4. Emergency telephone number

Emergency number : INFOTRAC 1-800-424-5571

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Skin sensitization Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 2	H351	Suspected of causing cancer (Dermal, Inhalation, oral)
Aspiration hazard Category 1	H304	

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from open flames. - No smoking
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing fume, vapors
P264 - Wash hands thoroughly after handling
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear eye protection, protective gloves
P301+P310 - If swallowed: Immediately call a POISON CENTER
P302+P352 - If on skin: Wash with plenty of water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water/shower
P308+P313 - If exposed or concerned: Get medical advice/attention
P321 - Specific treatment (see a POISON CENTER on this label)
P331 - Do NOT induce vomiting
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use carbon dioxide (CO₂), dry extinguishing powder, foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Fuels, diesel, no. 2	(CAS No) 68476-34-6	1-50	Carc. 2, H351
kerosine(petroleum), hydrodesulfurized	(CAS No) 64742-81-0	15 - 30	Asp. Tox. 1, H304
kerosine (petroleum)	(CAS No) 8008-20-6	15 - 30	Flam. Liq. 3, H226 Asp. Tox. 1, H304
dipentene	(CAS No) 138-86-3	7.5 - 15	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/injuries after ingestion : Risk of lung edema.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.
Reactivity : Flammable liquid and vapor.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Incompatible products : Oxidizing agent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

kerosine(petroleum), hydrosulfurized (64742-81-0)		
ACGIH	ACGIH TWA (mg/m ³)	200 mg/m ³ (Kerosene/Jet fuels, as total hydrocarbon vapor; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Application restricted to conditions in which there are negligible aerosol exposures)
kerosine (petroleum) (8008-20-6)		
ACGIH	ACGIH TWA (mg/m ³)	200 mg/m ³ (Kerosene/Jet fuels, as total hydrocarbon vapor; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Application restricted to conditions in which there are negligible aerosol exposures)
dipentene (138-86-3)		
Not applicable		
Fuels, diesel, no. 2 (68476-34-6)		
ACGIH	ACGIH TWA (mg/m ³)	100 mg/m ³ (Diesel fuel, as total hydrocarbons; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)

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8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Mixture contains one or more component(s) which have the following colour(s): No data available on colour Pure substance: colourless to light yellow Commercial substance: coloured Colourless to light yellow
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): No data available on odour Petroleum-like odour Lemon odour Mild odour
Odor threshold	: No data available
pH	: 7.9
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 314 °F
Flash point	: 97 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 0.5 psi
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.856 @ 60° F
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 9.12 cSt @ 60° F
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

kerosine (petroleum) (8008-20-6)	
LD50 oral rat	> 5000 mg/kg body weight (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h (Rat; Experimental value)
dipentene (138-86-3)	
LD50 oral rat	5300 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit; Literature study)
ATE US (oral)	5300.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
pH: 7.9

Serious eye damage/irritation : Not classified
pH: 7.9

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer (Dermal, Inhalation, oral).

kerosine (petroleum) (8008-20-6)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/injuries after ingestion : Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

kerosine (petroleum) (8008-20-6)	
LC50 fish 1	2-5,LL50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Semi-static system; Fresh water; Experimental value

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kerosine (petroleum) (8008-20-6)	
EC50 Daphnia 1	1.4 mg/l (EL50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	1-3,EL50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value
Threshold limit algae 2	1 mg/l (NOEL; OECD 201: Alga, Growth Inhibition Test; 48 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
dipentene (138-86-3)	
EC50 Daphnia 2	0.048 mg/l (LC50; ECOSAR; 96 h; Mysidacea)

12.2. Persistence and degradability

kerosine (petroleum) (8008-20-6)	
Persistence and degradability	Biodegradable in water. No significant hydrolysis. Adsorbs into the soil.
dipentene (138-86-3)	
Persistence and degradability	Biodegradable in water. Not easily biodegradable in water in anaerobic conditions. Biodegradable in the soil. Low potential for mobility in soil. Ozonation in the air.
ThOD	3.29 g O ₂ /g substance

12.3. Bioaccumulative potential

kerosine (petroleum) (8008-20-6)	
Bioaccumulative potential	No test data available.
dipentene (138-86-3)	
BCF other aquatic organisms 1	917 - 931 (BCF; BCFBAF v3.00)
Log Pow	4.57 (Experimental value)
Bioaccumulative potential	Bioaccumable.

12.4. Mobility in soil

kerosine (petroleum) (8008-20-6)	
Surface tension	0.02-0.03
dipentene (138-86-3)	
Surface tension	0.026 N/m (20 °C)
Log Koc	log Koc, SRC PCKOCWIN v2.0; 3.049 - 3.801; QSAR

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1993 Flammable liquids, n.o.s. (kerosine (petroleum)), 3, III
UN-No.(DOT) : UN1993
Proper Shipping Name (DOT) : Flammable liquids, n.o.s.
kerosine (petroleum)
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT) : III - Minor Danger

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Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
 DOT Packaging Bulk (49 CFR 173.xxx) : 242
 DOT Symbols : G - Identifies PSN requiring a technical name
 DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
 B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.
 IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
 T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
 TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
 TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
 DOT Packaging Exceptions (49 CFR 173.xxx) : 150
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
 DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
 Emergency Response Guide (ERG) Number : 128
 Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III
 UN-No. (IMDG) : 1993
 Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.
 Class (IMDG) : 3 - Flammable liquids
 Packing group (IMDG) : III - substances presenting low danger
 Limited quantities (IMDG) : 5 L

Air transport

Transport document description (IATA) : UN 1993 Flammable liquid, n.o.s., 3, III
 UN-No. (IATA) : 1993
 Proper Shipping Name (IATA) : Flammable liquid, n.o.s.
 Class (IATA) : 3 - Flammable Liquids
 Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

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SARA Section 311/312 Hazard Classes

Fire hazard

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kerosine(petroleum), hydrodesulfurized (64742-81-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

kerosine (petroleum) (8008-20-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

dipentene (138-86-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Fuels, diesel, no. 2 (68476-34-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

kerosine (petroleum) (8008-20-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

dipentene (138-86-3)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date : 01/23/2017

Full text of H-phrases:

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard

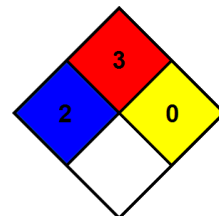
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



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HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product