

# MATERIAL SAFETY DATA SHEET

MSDS FORMAT MEETS ANSI Z400.1-1993 AND OSHA 1910.1200



## SENTINEL'S DIEFUEL

REVISION# 1

MSDS #

REVISION DATE: January 2, 2012

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Sentinel's DIEFUEL

PRODUCT NUMBER (S): 02080

SYNONYM: Sentinel's Diefuel

**COMPANY IDENTIFICATION**

Sentinel Lubricants Corp.  
15755 N.W. 15<sup>th</sup> Ave.  
Miami, FL 33169

**EMERGENCY TELEPHONE NUMBERS**

HEALTH (24 hr) : (800) 842-6400 or (305) 625-6400  
TRANSPORTATION (24 hr) : (800) 842-6400  
or (305) 625-6400 Int'l collect calls accepted

**PRODUCT INFORMATION:**

MSDS Requests: (800) 842-6400  
Environmental, Safety, & Health Info: (800) 842-6400  
Product Information: (800) 842-6400

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

100% SENTINEL'S DIEFUEL

**CONTAINING**

**COMPONENTS**

**AMOUNT**

**LIMIT/QTY**

**AGENCY/TYPE**

**ALIPHATIC HYDROCARBON**

Chemical Name: Diesel and Gasoline Fuel Additive  
CAS8052-41-3

**COMPOSITION COMMENT**

All the components of this material are in the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m<sup>3</sup>, the OSHA PEL is 5mg/m<sup>3</sup>.

**3. HAZARD IDENTIFICATION AND EMERGENCY AND FIRST AID PROCEDURES**

\*\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*\*

Liquid

- COMBUSTIBLE LIQUID AND VAPOR

\*\*\*\*\*

POTENTIAL HEALTH EFFECTS

EYE:

If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN

In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high-pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INGESTION

If ingested, DO NOT induce VOMITING; call a physician immediately.

INHALATION

If overcome by vapors, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, administer oxygen if available.

SIGNS AND SYMPTOMS OF EXPOSURE:

Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, and loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

**4. FIRST AID MEASURES**

EYE:

If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN

In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INGESTION

If ingested, DO NOT induce VOMITING; call a physician immediately.

INHALATION

If overcome by vapors, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, administer oxygen if available.

NOTE TO PHYSICIANS

In an accident involving high-pressure systems, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

## 5. FIRE FIGHTING MEASURES

### SPECIAL NOTES:

Leaks/ ruptures in high-pressure systems using materials of this type can create a fire hazard when in the vicinity of ignition sources (e.g. Open flame, pilot lights, sparks, or electric arcs).

### FIRE CLASSIFICATION:

Classification (29 CFR 1910.1200): Combustible Liquid and vapor

### FLAMMABLE PROPERTIES:

FLASH POINT (COC) 38°C (100°F) Min.

AUTOIGNITION: Approximately 255 C (490 F)

FLAMMABILITY LIMITS (% by volume in air): Lower: 2.3% UPPER: 14.4%

EXTINGUISHING MEDIA: CO2, Dry Chemical, Foam, Water Fog

NFPA RATINGS: Health 1; Flammability 2; Reactivity; 0.

### FIRE FIGHTING INSTRUCTIONS:

This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

### COMBUSTION PRODUCTS:

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in case of incomplete combustion.

## 6. ACCIDENTAL RELEASE MEASURES

EMERGENCY NUMBER (24hr) : (800) 842-6400 or (305) 625-6400, International Collect Calls Accepted.

### ACCIDENTAL RELEASE MEASURES:

Eliminate all sources of ignition in vicinity of released gas. Stop the source of the leak or release. Clean up releases as soon as possible. Contain liquid to prevent further contamination of soil, surface water or leading to surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

This material does not contain any CERCLA Hazardous Substances.

This material does not contain any SARA Title III Section 302 – Extremely Hazardous Substances.

This material does not contain any SARA Title III Section 313 – Toxic Chemicals.

## 7. HANDLING AND STORAGE

Liquid evaporates and forms vapor (fumes), which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85°F. Do not use or store near heat, sparks, or open flames. Use or store only in a well-ventilated area. Keep container closed when material is not in use.

Avoid work practices that may release volatile components into the atmosphere. Local air pollution regulations should be consulted to determine if the release of volatile components is regulated or restricted in the area in which this material is used.

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, review all operations, which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to American Petroleum Institute (API) Recommend Practice 2003, "Protection Against Ignitions Arising Out Of Static, Lightning, and Stray Currents" and/or National Fire Protection Association (NFPA) 77, "Recommend Practice on Static Electricity.

Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or properly disposed of. Do not breathe vapor or fumes. Wash thoroughly after handling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATION

Consider the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limit.

### PERSONAL PROTECTIVE EQUIPMENT:

Where splashing is possible, wear safety glasses with side shields as a good safety practice.

### EYE PROTECTION:

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

### SKIN PROTECTION:

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield>

### RESPIRATORY PROTECTION

No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not wear an approved respirator that provides adequate protection from the measured concentrations of this material. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES****PHYSICAL DESCRIPTION:**

Clear Amber, Fluid, Typical Odor

pH:	Essentially neutral 7
VAPOR PRESSURE:	5.6 mm Hg @ 20 C (68 F)
VAPOR DENSITY (AIR = 1):	3.9
BOILING POINT:	157-203 C (315-397 F)
FREEZING POINT:	-18 C
MOLECULAR WEIGHT:	145
SOLUBILITY:	Solubility in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.79 @ (15.6/15.6C)
EVAPORATION RATE:	NA
VISCOSITY:	1.14 cSt @ 25°C
PERCENT VOLATILE (VOL):	100 @ 1 atm and 25 C (77 F)

**10. STABILITY AND REACTIVITY****HAZARDOUS DECOMPOSITION PRODUCTS:**

No data available.

**CHEMICAL STABILITY:**

Stable.

**CONDITIONS TO AVOID:**

No data available.

**INCOMPATIBILITY WITH OTHER MAETERIALS:**

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

### EYE EFFECTS:

The eye irritation hazard is based on data for a similar material.

### SKIN EFFECTS:

The skin irritation hazard is based on data for a similar material.

### EYE EFFECTS:

The eye irritation hazard is based on data for a similar material.

### SKIN EFFECTS:

The skin irritation hazard is based on data for a similar material.

### ACUTE ORAL EFFECTS:

The acute oral toxicity is based on data for a similar material.

### ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on data for a similar material.

### ADDITIONAL TOXICOLOGY INFORMATION:

This product contains synthetic base oils not refined from petroleum base stocks. The potential of base oil prepared by this process to cause cancer has not been specifically addressed by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the International Agency for Research on Cancer (IARC), nor the National Toxicology Program (NTP) Annual Report. However, the process conditions, chemical analysis, and the results of mutagenicity tests all support our opinion that these oils should not cause skin cancer.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY:

No data available.

### ENVIRONMENTAL FATE:

This material is considered inherently biodegradable. Small accidental leaks or releases of this material are not expected present an Environmental problem. See section 6 for Accidental Release Measures.

## 13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods

## 14. TRANSPORTATION AND OSHA RELATED LABEL INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: PETROLEUM PRODUCT, N.O.S.  
 DOT HAZARD CLASS: COMBUSTIBLE LIQUID  
 DOT IDENTIFICATION NUMBER: UN1268  
 DOT PACKING GROUP: III

ADDITIONAL INFORMATION: NON-BULK PACKAGES ARE NOT REGULATED IN THE U.S.A. UNLESS SHIPPED BY AIRCRAFT OR VESSEL. 49 CFR 173.150 (f)

LABEL/PLACARD: COMBUSTIBLE

## 15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

- |                                       |     |
|---------------------------------------|-----|
| 1. Immediate (Acute) Health Effects:  | NO  |
| 2. Delayed (Chronic) Health Effects:  | NO  |
| 3. Fire Hazard:                       | YES |
| 4. Sudden Release of Pressure Hazard: | NO  |
| 5. Reactivity Hazard:                 | NO  |

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a) (2)
02=MASS RTK	12=Cercla 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12 (b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8 (d)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8 (a)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4 (a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Sentinel TWA	30=Sentinel STEL
10=PA RTK	20=EPA Carcinogen	

EU RISK AND SAFETY LABEL PHRASES:

May cause long-term adverse effects in the aquatic environment

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. Seq., the product is to be identified as follows:  
 PETROLEUM OIL

## 16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 2; Reactivity 0;

HMIS RATINGS: Health 1; Flammability 2; Reactivity 0;

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator).

These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (For HMIS ratings)

### REVISION STATEMENT:

This is a new Material Safety Data Sheet.

### ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	TPQ	-	Threshold Planning Quantity
RQ	-	Reportable Quantity	PEL	-	Permissible Exposure Limit
C	-	Ceiling Limit	CAS	-	Chemical Abstract Service Number
A1-5	-	Appendix A Categories	( )	-	Change Has Been Proposed
NDA	-	No Data Available	NA	-	Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1)

The above information is based on the data of which we are aware and is believed to be correct as of data hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date. Hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.