

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : PENRAY DIESEL FUEL PREP  
Product code : 81012

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Diesel Fuel Prep

#### 1.3. Details of the supplier of the safety data sheet

The Penray Companies, Inc.  
440 Denniston Ct.  
60090 Wheeling, IL  
T (800) 373-6729  
[rotto@penray.com](mailto:rotto@penray.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 373-6729  
CHEMTREC (800) 424-9300  
CHEMTREC International +1 (703) 527-3887 24 hr

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable Liquid 3  
Acute toxicity 4 (Inhalation)  
Skin irritation 2  
Specific target organ toxicity - Single exposure 3  
Aspiration hazard 1

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statements (GHS-US) :

Keep away from heat/sparks/open flames/hot surfaces.— No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Dispose of contents and container in accordance with all local, regional, national and international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
2-Ethylhexyl nitrate	(CAS No) 27247-96-7	40 - 70	Flam. Liq. 4 Acute Tox. 4 (Inhalation)
Kerosene, petroleum	(CAS No) 8008-20-6	15 - 40	Flam. Liq. 3 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
Solvent naphtha, petroleum, heavy aromatic	(CAS No) 64742-94-5	1 - 5	Flam. Liq. 3 Asp. Tox. 1
Solvent naphtha, petroleum, light aromatic	(CAS No) 64742-95-6	1 - 5	Asp. Tox. 1
Benzene, 1,2,4-trimethyl-	(CAS No) 95-63-6	0.5 - 1.5	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Eye Irrit. 2A STOT SE 3
Naphthalene	(CAS No) 91-20-3	0.1 - 1	Acute Tox. 4 (Oral, Dermal) Carc. 2
Xylenes (o-, m-, p- isomers)	(CAS No) 1330-20-7	< 0.1	Flam. Liq. 3 Acute Tox. 4 (Dermal, Inhalation) Skin Irrit. 2
Cumene	(CAS No) 98-82-8	< 0.1	Flam. Liq. 3 Acute Tox. 4 (Oral) Carc. 2

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Get immediate medical advice/attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove ignition sources.

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### 6.2. Methods and material for containment and cleaning up

- For containment : Dike and contain spill. Stop leak if safe to do so. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from sources of ignition - No smoking. Do not get in eyes, on skin, or on clothing. Avoid breathing vapour or mist. Do not swallow. When using do not eat, drink or smoke. Handle and open container with care. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Keep away from heat, flames and sparks. Keep cool. Store locked up.

### 7.3. Specific end use(s)

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Kerosene, petroleum (8008-20-6)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	200 mg/m <sup>3</sup>

Benzene, 1,2,4-trimethyl- (95-63-6)		
USA ACGIH	ACGIH TWA (ppm)	25 ppm

Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

Xylenes (o-, m-, p- isomers) (1330-20-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm

Cumene (98-82-8)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	245 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm

### 8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Chemical-resistant gloves.
- Eye protection : Safety glasses or goggles are recommended when using product.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. Ensure that eyewash stations and safety showers are close to the workstation location.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : No data available.  
Odour : No data available.  
Odour threshold : No data available.  
pH : No data available.  
Relative evaporation rate (butylacetate=1) : No data available.  
Melting point : No data available.  
Freezing point : No data available.  
Boiling point : No data available.  
Flash point : > 53.5 °C (> 128.3 °F)  
Self ignition temperature : No data available.  
Decomposition temperature : No data available.  
Flammability (solid, gas) : Flammable.  
Vapour pressure : No data available.  
Relative vapour density at 20 °C : No data available.  
Relative density : No data available.  
Solubility : No data available.  
Log Pow : No data available.  
Log Kow : No data available.  
Viscosity, kinematic : No data available.  
Viscosity, dynamic : No data available.  
Explosive properties : No data available.  
Oxidising properties : No data available.  
Explosive limits : No data available.

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapour-air mixture.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials. Open flame.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

##### 81012

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	~ 14.2 mg/l/4h

##### 2-Ethylhexyl nitrate (27247-96-7)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 4820 mg/kg
LC50 inhalation rat (mg/l)	> 14 mg/l/4h

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

<b>Kerosene, petroleum (8008-20-6)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h

<b>Solvent naphtha, petroleum, heavy aromatic (64742-94-5)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h

<b>Solvent naphtha, petroleum, light aromatic (64742-95-6)</b>	
LD50 oral rat	8400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h
LC50 inhalation rat (ppm)	3400 ppm/4h

<b>Benzene, 1,2,4-trimethyl- (95-63-6)</b>	
LD50 oral rat	3400 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat (mg/l)	18 g/m <sup>3</sup> /4 h

<b>Naphthalene (91-20-3)</b>	
LD50 oral rat	490 mg/kg
LD50 dermal rat	>2500 mg/kg
LD50 dermal rabbit	> 20 g/kg

<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
LD50 oral rat	4300 mg/kg
LD50 dermal rabbit	> 1700 mg/kg
ATE (dust,mist)	1.5 mg/l/4h

<b>Cumene (98-82-8)</b>	
LD50 oral rat	1400 mg/kg
LD50 dermal rabbit	>3160 mg/kg
LC50 inhalation rat (mg/l)	39000 mg/m <sup>3</sup> /4 h

Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	:	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	:	Based on available data, the classification criteria are not met.
Carcinogenicity	:	Suspected of causing cancer.

<b>Naphthalene (91-20-3)</b>	
IARC group	2B
National Toxicity Program (NTP) Status	1, 3

<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
IARC group	3

<b>Cumene (98-82-8)</b>	
IARC group	2B
National Toxicity Program (NTP) Status	1

Reproductive toxicity	:	Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	:	May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	:	Based on available data, the classification criteria are not met.
Aspiration hazard	:	May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	:	Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	:	Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	:	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

##### 81012

Persistence and degradability	Not established.
-------------------------------	------------------

#### 12.3. Bioaccumulative potential

##### 81012

Bioaccumulative potential	Not established.
---------------------------	------------------

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.

### SECTION 14: Transport information

In accordance with DOT

#### 14.1. UN number

UN-No. : 1993

#### 14.2. UN proper shipping name

Proper Shipping Name : Flammable liquids, n.o.s. (Kerosene)

Department of Transportation Hazard Classes : 3

Hazard labels :



Packing group : III

#### 14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### 2-Ethylhexyl nitrate (27247-96-7)

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

##### Kerosene, petroleum (8008-20-6)

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

##### Solvent naphtha, petroleum, heavy aromatic (64742-94-5)

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

##### Solvent naphtha, petroleum, light aromatic (64742-95-6)

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

##### Benzene, 1,2,4-trimethyl- (95-63-6)

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

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting	1.0 %
---------------------------------------	-------

##### Naphthalene (91-20-3)

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

Listed on SARA Section 313 (Specific toxic chemical listings)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
--------------------------	--

SARA Section 313 - Emission Reporting	0.1 %
---------------------------------------	-------

# PENRAY DIESEL FUEL PREP

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### Xylenes (o-, m-, p- isomers) (1330-20-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting 1.0 %

### Cumene (98-82-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on SARA Section 313 (Specific toxic chemical listings)

EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

SARA Section 313 - Emission Reporting 1.0 %

### 15.2. US State regulations

#### 81012

State or local regulations This product contains chemicals known to the State of California to cause cancer.

### SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

#### IARC (I)

#### International Agency for Research on Cancer.

1 - Carcinogenic to humans;  
2A - Probably carcinogenic to humans;  
2B - Possibly carcinogenic to humans;  
3 - Not classifiable;  
4 - Probably not carcinogenic to humans.

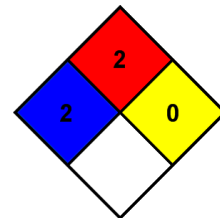
#### NTP (N)

#### National Toxicology Program.

1 - Evidence of Carcinogenicity;  
2 - Known Human Carcinogens;  
3 - Reasonably anticipated to be Human Carcinogen;  
4 - Substances delisted from report on Carcinogens;  
5 - Twelfth Report - Items under consideration.

### SECTION 16: Other information

Indication of changes : None.  
Date of issue : 03/05/2014  
Other information : None.  
  
NFPA health hazard : 2  
NFPA fire hazard : 2  
NFPA reactivity : 0



*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*