Section 1: Product & Company Identification

Product Name: Fuel Therapy® Diesel Injector Cleaner Plus
Product Number (s): 05212
Product Use: fuel additive

Manufacturer / Supplier Contact Information:
In United States: CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com
1-215-674-4300 (General)
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)
In Canada: CRC Canada Co.
2-1246 Lorimar Drive
Mississauga, Ontario L5S 1R2
www.crc-canada.ca
1-905-670-2291
In Mexico: CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquidea
San Luis Potosí, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview
DANGER: Combustible. Harmful or Fatal if Swallowed.
As defined by OSHA’s Hazard Communication Standard, this product is hazardous.
Appearance & Odor: Dark amber liquid, petroleum odor

Potential Health Effects:

ACUTE EFFECTS:
EYE: Contact with liquid or vapor may cause mild irritation.
SKIN: May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following a single exposure.
INHALATION: Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death.
INGESTION: Ingestion may cause gastrointestinal disturbance, including irritation, nausea, vomiting and diarrhea. The major threat of ingestion occurs from the danger of aspiration of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia, severe lung damage and even death.

CHRONIC EFFECTS: Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

TARGET ORGANS: Central nervous system

Medical Conditions Aggravated by Exposure: Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis.

See Section 11 for toxicology and carcinogenicity information on product ingredients.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillate</td>
<td>68476-34-6</td>
<td>80 - 90</td>
</tr>
<tr>
<td>Mineral spirits</td>
<td>8052-41-3</td>
<td>5 - 15</td>
</tr>
<tr>
<td>Petroleum naphtha</td>
<td>64742-94-5</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Additive blend</td>
<td>Trade secret</td>
<td>3 - 8</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Mouth can be rinsed to dissipate the taste.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is a Class II Combustible Liquid.

- Flash Point: 139°F (TCC)
- Autoignition Temperature: 494°F
- Upper Explosive Limit: 7.5
- Lower Explosive Limit: 0.6

Fire and Explosion Data:

Suitable Extinguishing Media: Use extinguishers rated for Class B fires, such as dry chemical, Halon, fire fighting foam or CO₂.

Products of Combustion: Oxides of carbon

Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.
Methods for Containment & Clean-up: Remove all sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

**Section 7: Handling and Storage**

**Handling Procedures:** Keep away from heat, sparks, and open flame. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion. Provide adequate ventilation during use. Do not breathe vapors. Wash hands after use. For product use instructions, please see the product label.

**Storage Procedures:** Store in a cool dry area out of direct sunlight. Containers should be tightly closed while in storage. Store in a well ventilated area. Keep out of reach of children.

**Aerosol Storage Level:** NA

**Section 8: Exposure Controls/ Personal Protection**

**Exposure Guidelines:**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>5</td>
<td>NE</td>
<td>100 (s)</td>
</tr>
<tr>
<td>Mineral spirits</td>
<td>500</td>
<td>NE</td>
<td>100</td>
</tr>
<tr>
<td>Petroleum naphtha</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>10</td>
<td>15(c)</td>
<td>10 (s)</td>
</tr>
<tr>
<td>Additive blend</td>
<td>25 (v)</td>
<td>NE</td>
<td>25</td>
</tr>
</tbody>
</table>

N.E. – Not Established  (c) – ceiling  (s) – skin  (v) – vacated

**Controls and Protection:**

**Engineer Controls:** Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

**Respiratory Protection:** None required for normal work where adequate ventilation is provided. Use NIOSH-approved self-contained positive pressure respirators in low circulation areas and for emergencies.

**Eye/face Protection:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**Skin Protection:** Use protective gloves such as nitrile, neoprene or PVC. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

**Section 9: Physical and Chemical Properties**

**Physical State:** liquid
**Color:** dark amber
Product Name: Fuel Therapy® Diesel Injector Cleaner Plus  
Product Number(s): 05212

Odor: petroleum  
Odor Threshold: ND  
Specific Gravity: 0.84  
Initial Boiling Point: 320°F  
Freezing Point: ND  
Vapor Pressure: ND  
Vapor Density: > 1 (air = 1)  
Evaporation Rate: slow  
Solubility: negligible in water  
Coefficient of water/oil distribution: ND  
pH: NA  
Volatile Organic Compounds: wt %: 47.56  
            g/L: 399.5  
            lbs/gal: 3.33

Section 10: Stability and Reactivity

Stability: Stable  
Conditions to Avoid: Temperature extremes, sources of ignition  
Incompatible Materials: Strong oxidizers, Viton®, Fluorel®  
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, non-combusted hydrocarbons (smoke)  
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Distillate</td>
<td>9 mL/kg</td>
<td>&gt; 5 mL/kg</td>
<td>No data</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>&gt; 5 g/kg</td>
<td>&gt; 3 g/kg</td>
<td>&gt; 1400 ppm/8H</td>
</tr>
<tr>
<td>Petroleum Naphtha</td>
<td>No data</td>
<td>&gt; 2 mL/kg</td>
<td>&gt; 590 mg/m³/4H</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>490 mg/kg</td>
<td>&gt; 20 g/kg</td>
<td>No data</td>
</tr>
<tr>
<td>Additive blend</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant</th>
<th>Sensitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Distillate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild) / S (mild) / R (moderate)</td>
<td>No</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild) / S (mild)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Petroleum Naphtha</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild) / S (moderate)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>No</td>
<td>Group 2B</td>
<td>Reasonably Anticipated to be a Carcinogen</td>
<td>E (moderate) / S (mild) / R (moderate)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Additive blend</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

E – Eye  S – Skin  R – Respiratory
Product Name: Fuel Therapy® Diesel Injector Cleaner Plus
Product Number (s): 05212

Reproductive Toxicity: No information available
Teratogenicity: No information available
Mutagenicity: No information available
Synergistic Effects: No information available
Other: Petroleum Distillate: This material has been positive in a mutagenicity study

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Naphthalene -- 48 Hr EC50 water flea: 2.16 mg/L
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: Spills may penetrate the soil causing groundwater contamination. This material may accumulate in sediments.

Section 13: Disposal Considerations

Waste Classification: This product is a RCRA hazardous waste for the flammability characteristic and the toxicity characteristic (1.3 mg/L Benzene) with the following potential waste codes: D001, D018. (See 40 CFR Part 261.20 – 261.33)
Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Not Regulated*
ICAO/IATA (air): Consumer Commodity, ID8000, 9
IMO/IMDG (water): Flammable liquids, N.O.S. (mineral spirits, petroleum distillate), UN1993, 3, PGIII, Limited Quantity
Special Provisions: *Per 49 CFR 173.150(f)(2), a material classed as a combustible liquid (in non-bulk packaging) is not subject to the shipping requirements of Subchapter C, including marking, placarding and shipping paper requirements. This applies to ground transportation only.

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA): All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): Reportable Quantities (RQ's) exist for the following ingredients: Naphthalene (100 lbs)
Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.
Product Name: Fuel Therapy® Diesel Injector Cleaner Plus
Product Number(s): 05212

Superfund Amendments Reauthorization Act (SARA) Title III:
Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:
- Fire Hazard: Yes
- Reactive Hazard: No
- Release of Pressure: No
- Acute Health Hazard: Yes
- Chronic Health Hazard: Yes

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Naphthalene (0.16%)

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): Naphthalene

U.S. State Regulations:
California Safe Drinking Water and Toxic Enforcement Act (Prop 65):
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Naphthalene (0.16%), Benzene (0.00016%)

Consumer Products VOC Regulations: This product is not regulated

State Right to Know:
Pennsylvania: 91-20-3, 25551-13-7, 95-63-6, 8052-41-3
Massachusetts: 91-20-3, 25551-13-7, 95-63-6, 8052-41-3
Rhode Island: 91-20-3, 25551-13-7, 8052-41-3

Canadian Regulations:
Controlled Products Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: B3, D2A

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

Additional Regulatory Information: This diesel fuel additive complies with the federal ultra-low sulfur content requirements for use in all diesel motor vehicles and non-road engines.
Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health:</td>
<td>2</td>
</tr>
<tr>
<td>Flammability:</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity:</td>
<td>0</td>
</tr>
<tr>
<td>PPE:</td>
<td>B</td>
</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 924
Revision Date: 01/25/2010

Changes since last revision: Formula change

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries’ knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists  NA: Not Applicable
CAS: Chemical Abstract Service  ND: Not Determined
DOT: Department of Transportation  NFPA: National Fire Protection Association
DSL: Domestic Substance List  NTP: National Toxicology Program
G/L: grams per Liter  OSHA: Occupational Safety and Health Administration
HMIS: Hazardous Materials Identification System  PMCC: Pensky-Martens Closed Cup
IARC: International Agency for Research on Cancer  PPE: Personal Protection Equipment
IATA: International Air Transport Association  ppm: Parts per Million
ICAO: International Civil Aviation Organization  RoHS: Restriction of Hazardous Substances
IMDG: International Maritime Dangerous Goods  STEL: Short Term Exposure Limit
IMO: International Maritime Organization  TCC: Tag Closed Cup
ibs./gal: pounds per gallon  TWA: Time Weighted Average
LC: Lethal Concentration  WHMIS: Workplace Hazardous Materials Information System
LD: Lethal Dose