



Material Safety Data Sheet

Section 1 – Product and Company Identification

Product Name: Diesel Cetane Booster
Product Synonyms: Cetane; DCB; DCB-1
Product Number: 0517
Product Description: Aftermarket diesel fuel additive
Manufacturer: Berryman Products, Inc.
3800 E Randol Mill Rd
Arlington, TX 76011
(800) 433-1704 within USA
(817) 640-2376 outside USA
www.BerrymanProducts.com

Emergency Contact: Infotrac, Inc., (800) 535-5053

Section 2 – Hazards Identification

Emergency Overview: Combustible. Vapor harmful. Self-reacting above 212°F.

Routes of Exposure: Ingestion, inhalation, eye contact, skin contact

Possible Health Hazards

Eyes: May cause mild to moderate irritation of the eyes.

Skin: May cause mild to moderate irritation of the skin. Prolonged or repeated contact may dry the skin, result in dermatitis and vasodilation and produce effects similar to those of overexposure by way of inhalation.

Inhalation: Acute overexposure may result in vasodilation, headache, dizziness, nausea, vomiting, and unconsciousness. Chronic overexposure or intentional abuse may adversely affect the liver, kidneys, lungs, and central nervous system. May aggravate asthma, emphysema, and bronchitis.

Ingestion: Accidental ingestion and subsequent aspiration of even small quantities may cause severe lung damage, aspiration pneumonitis, cyanosis, and death. Ingestion of larger amounts may also include dizziness; fatigue; unconsciousness; and gastrointestinal effects, such as abdominal discomfort, pain, nausea, and vomiting; and adversely affect the liver, kidneys, lungs, and central nervous system.

Supplemental Information: See "Section 11 – Toxicological Information" for additional information.

Section 3 – Composition / Information on Ingredients

<u>Ingredient</u>	<u>CAS Number</u>	<u>Weight</u>
Aliphatic Petroleum Distillates	64742-47-8	50-60%
2-Ethylhexanol	104-76-7	10-15%
2-Ethylhexyl Nitrate	27247-96-7	25-30%

Section 4 – First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes, holding the eyelids apart at regular intervals to ensure complete irrigation. Dispose of contaminated contact lenses.

Skin Contact: Remove contaminated clothing, and wash affected areas of body thoroughly with soap and water. Allow clothing to air dry, and launder before reuse. Seek medical attention if irritation persists.

Inhalation: If breathing difficulties occur, remove source of exposure or move victim to fresh air and administer oxygen, if necessary. If symptoms persist, seek immediate medical attention. If breathing stops, give artificial respiration and seek immediate medical attention.

Ingestion: Do *not* induce vomiting unless otherwise directed by a medical professional. Dilute stomach contents by drinking 1-2 cups of milk or water. Seek medical attention immediately.

Section 5 – Firefighting Measures

Flash Point and Method: 105-120°F by Setaflash closed-cup tester

Flammability Limits (composite): Lower – 1% Upper – 8%

Suitable Extinguishing Media: All, including water fog, foam, dry chemical, and carbon dioxide

Unsuitable Extinguishing Media: Use water spray or fog with caution as product may float to surface and reignite.

Protective Equipment: Employ SBCA and full protective gear, including shield, as product is comprised of combustible and self-reacting solvents and may build pressure and vent, rupture, or explode violently at elevated temperatures.

Specific Procedures: Product may readily present explosion hazards at elevated temperatures. Remove product from area if possible without risk of injury. Use water spray to cool containers.

Section 6 – Accidental Release Measures

General Remediation Overview: Combustible! Self-reacting! Avoid all sources of heat and ignition and ventilate area!

Personal Precautions: Avoid all sources of heat, ignition, and unnecessary contact with product.

Environmental Precautions: Prevent further loss of product if safely possible.

Methods for Containment: Use booms or other barriers as necessary to prevent further loss.

Methods for Cleaning Up: For small spills, mop up or absorb with inert material, such as corn cob, cellulose, or vermiculite. For large spills, pump or transfer material into containers for recovery and use absorbent material for collection of unrecoverable product. Ensure thorough ventilation of the local area to prevent the accumulation of combustible vapor.

Section 7 – Handling and Storage

Handling: Avoid contact with skin and eyes. Wash hands thoroughly after use.

Storage: Store in cool, dry location far from heat sources and flammable products.

Section 8 – Exposure Controls / Personal Protection

<u>Ingredient</u>	<u>Exposure Limit</u>	<u>Source</u>
Aliphatic Petroleum Distillates (as Stoddard Solvent)	100 ppm	ACGIH
2-Ethylhexanol	NE	N/A
2-Ethylhexyl Nitrate	NE	N/A

Engineering Controls: Use outside with adequate ventilation to minimize exposure.

Respiratory Protection: If necessary, use respiratory protection sufficient to reduce exposure to permissible limits.

Eye Protection: Use of safety glasses with wrap-around lens or goggles is recommended.

Skin Protection: Employment of impermeable gloves is recommended.

Other Protection: For industrial settings, combination safety shower with eye wash station is recommended.

Section 9 – Physical and Chemical Properties

Physical State: Mobile liquid

Appearance: Clear, yellow to light amber

Odor: Mild to moderate aromatic

Freezing Point: <0°F (approximate)

Boiling Range: 212°F (decomposes)

Specific Gravity: 0.83-0.85 at 68°F

pH: N/A, as supplied

Solubility in Water: Limited

Volatile Content: 95-98%

Evaporation Rate: Slower than water

Vapor Density: Heavier than air

Vapor Pressure: <1 mm Hg at 68°F

VOC Content: N/A—not regulated

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions to 212°F. Undergoes self-sustaining decomposition above 212°F.

Incompatible Materials: Strong acids, oxidizers, reducing agents

Hazardous Decomposition Products: None under normal conditions of use. Thermal decomposition or combustion may yield hydrocarbons, oxides of carbon and nitrogen as well as various amino and oxygenated compounds.

Possibility of Hazardous Reactions: Negligible below 212°F. Undergoes self-sustaining decomposition above 212°F.

Section 11 – Toxicological Information

General Information: This formulated product has not been evaluated for toxicological properties. Acute toxicity is anticipated to be low to moderate, depending on exposure route. Chronic toxicity is expected to be low to moderate, but intentional abuse or repeated overexposure may cause organ damage or be fatal.

Acute Toxicity: No specific data available on blend

Chronic Toxicity: No specific data available on blend

Carcinogenicity: N/A

Teratogenicity: N/A

Mutagenicity: N/A

Supplemental Information: See “Section 2 – Hazards Identification” of this MSDS for additional information.

Section 12 – Ecological Information

Ecotoxicity: This product may be ecologically significant to aquatic environments even in small amounts.

Persistence and Degradability: All ingredients are ultimately biodegradable, but some secondary components are expected to be somewhat persistent.

Bioaccumulation Potential: Negligible

Section 13 – Disposal Considerations

Disposal Instructions: None specific. Dispose of waste in accordance with applicable regulations.

Section 14 – Transportation Information

US Department of Transportation (DOT): When shipped by ground as-supplied, this product is eligible for “Limited Quantity” and “Combustible Liquid” exceptions per §49 CFR 173.150. Otherwise, it should bear the following shipping description:

UN1993, Flammable Liquid, N.O.S. (contains Petroleum Distillates and 2-Ethylhexyl Nitrate), 3, III

International Air Transportation Association (IATA): When shipped by air, this product may be eligible for a “Limited Quantity” exception. Otherwise, it should bear the following shipping description:

UN1993, Flammable Liquid, N.O.S. (contains Petroleum Distillates and 2-Ethylhexyl Nitrate), 3, III

Section 15 – Regulatory Information

FEDERAL CONSIDERATIONS

SARA Title III, Section 302 – Extremely Hazardous Substances: Neither this product nor any of its components appear on the list of extremely hazardous substances (EHS) found in §40 CFR 355 Appendices A and B and are not subject to the emergency planning (EPCRA) requirements of §40 CFR 355.30 or the reportable quantity (RQ) and threshold planning quantity (TPQ) requirements of §40 CFR 355 Appendices A and B.

SARA Title III, Section 304 – Hazardous Substances: This product does *not* contain any components found in the list of hazardous substances of §40 CFR Table 302.4.

SARA Title III, Sections 311/312 – Hazard Classes: This product contains one or more ingredients that are classified into the following hazard categories outlined in §40 CFR 370.40: fire; sudden release of pressure; immediate (acute) health; delayed (chronic) health

SARA Title III, Section 313 – Toxic Chemicals: This product does *not* contain any chemicals listed in the table of §40 CFR 372.65 exceeding the *de minimis* concentration reporting requirements of §40 CFR 372.38.

Section 15 – Regulatory Information (continued)

FEDERAL CONSIDERATIONS (continued)

Fuels and Fuel Additives (EPA) – This product complies with the registration and sulfur content requirements of §40 CFR 80 and must be used in a manner consistent with the directions on the product label.

Toxic Substances Control Act (TSCA): All chemicals known to be present in this product are either listed on the TSCA inventory or are not required to be per §15 USC 2601, et seq.

Occupation Safety and Health Administration (OSHA): This material safety data sheet is provided for compliance with the applicable regulations of OSHA’s Hazard Communication Standard (“HCS” or “HAZCOM”) found in §29 CFR 1910.1200(g). Federal law requires persons receiving this document to study it carefully and become aware of its hazards. Notify all employees, visitors, agents, and contractors of the information on this sheet.

Consumer Product Safety Commission (CPSC): If sold in the United States, this product is regulated under the Federal Hazardous Substances Act, is subject to the labeling requirements of 16 CFR 1500, and must include the following cautionary statements: DANGER. Combustible. Harmful or fatal if swallowed. Vapor Harmful. Eye and skin irritant. Keep out of the reach of children.

REGIONAL CONSIDERATIONS

Lake Michigan Air Directors Consortium (LADCO): N/A—not regulated as a fuel additive

Ozone Transport Commission (OTC): N/A—not regulated as a fuel additive

STATE CONSIDERATIONS

California: This product is *not* subject to the category VOC requirements of §94509 of Subchapter 8.5 Article 2 of the Air Resource Board’s “Regulation for Reducing Emissions from Consumer Products.”

This product is *not* subject to the labeling requirements of “Proposition 65 – Safe Drinking Water and Toxic Enforcement Act of 1986” (“Prop 65”).

New Jersey: For Right-To-Know (“RTK”) labeling requirements, refer to “Section 3 – Composition / Information on Ingredients.”

Section 16 – Other Information

Hazardous Materials Identification System (HMIS)

HMIS Hazard Rating	HMIS Hazard Index
Health 1	Least - 0
Flammability 2	Slight - 1
Reactivity 0	Moderate - 2
Protective Equipment X	High - 3
	Extreme - 4

Index of Abbreviations

ACGIH – American Council of Governmental and Industrial Hygienists

N/A – not applicable

ND – Not determined

NE – Not established

NIOSH – National Institute for Occupational Safety and Health

PEL – Permissible Exposure Limit (as required by OSHA)

TLV – Threshold Limit Value (as recommended by ACGIH)

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Primary Revision Change(s): Formula modification

Applicability: This document only applies to part number 0517 manufactured on or after July 18, 2013.

Prepared By: Dan Nowlan

Legal Disclaimer: The information contained in this document is, to the best of Berryman Products, Inc.’s knowledge, complete and accurate but is not warranted. All materials may present unknown hazards and should be used with caution. It is the responsibility of the user to evaluate the information in a prudent manner and to use it in a manner consistent with its intended purpose. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.