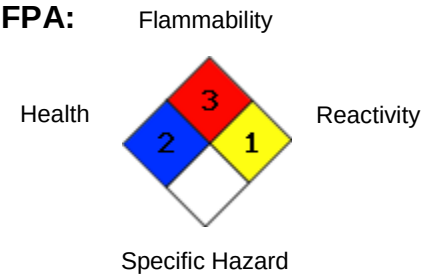
Material Safety Data Sheet: Dynamo Octane Booster Gasoline Treatment

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL	1

0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dynamo Octane Booster

MSDS Number : 0005 **Version** : 2.0

Product Use Description : Fuel additive

Company : CyberFuels, Inc.
2401 PGA Blvd., Suite 196 East,
Palm Beach Gardens, FL 33410

Call Center : (617) 360-1927 **(Emergency Contact)**: (866) 771-3580

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Regulatory status : This material is considered hazardous by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

Signal Word : DANGER

Hazard Summary : Flammable. Highly Toxic. Contains components that may cause cancer.

Potential Health Effects

Eyes : May cause eye irritation.

Skin : May cause skin irritation. Can be absorbed through skin.

Ingestion : May be fatal if swallowed. Aspiration hazard if swallowed.

Chronic Exposure : Repeated over-exposure can damage liver, kidneys and central nervous system.

Target Organs : Skin, Central nervous system, Eyes

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Volume %
Methanol; Methyl alcohol	67-56-1	>20%
2- Ethylhexyl nitrate	27247-96-7	>10%
Proprietary Nitroparafin		3% - 10%
Acetone	67-64-1	>10%
Proprietary		5%
Proprietary		5%

SECTION 4. FIRST AID MEASURES

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.

Skin contact : May be absorbed through the skin in harmful amounts.
In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Contaminated leather, particularly footwear, must be discarded.

Note that contaminated clothing may be a fire hazard. If skin irritation persists, seek medical attention.

Eye contact : Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.

Ingestion : If swallowed induce vomiting immediately. Aspiration of material into lungs can cause pulmonary edema. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

Notes to physician : Inhalation, ingestion or skin absorption of methanol can cause significant disturbance in vision, including blindness. May cause systematic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma, and possible death due to failed respiratory failure. May cause cardiopulmonary system effects.

SECTION 5. FIRE-FIGHTING MEASURES

Form : Liquid

Flash point : 60 °C (140°F)

Lower explosive limit : Not determined
Upper explosive limit : Not determined

Suitable extinguishing media	:	Carbon dioxide blanket, Water spray, Dry chemical, Foam. SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon. LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.
Specific hazards during fire fighting	:	Fire Hazard Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Flash back possible over considerable distance.
Special protective equipment for fire-fighters	:	Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus and fully protective clothing such as bunker gear if needed to prevent exposure.
Further information	:	Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water may be subject to disposal regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Evacuate personnel to safe areas. Ventilate the area. Remove all sources of ignition. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).
Environmental precautions	:	Do not contaminate surface water. Should not be released into the environment. Authorities should be advised if significant releases cannot be contained.
Methods for cleaning up	:	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

SECTION 7. HANDLING AND STORAGE

Handling : Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.

Dust explosion class : Not applicable

Requirements for storage areas and containers : Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Advice on common storage : Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.

Other data : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

List	Components	CAS-No.	Type:	Value
	Methanol; Methyl alcohol	67-56-1	PEL	200 ppm 260 mg/m3
	Proprietary Nitroparafins		PEL	100 ppm 250 mg/m3
ACGIH	Methanol; Methyl alcohol	67-56-1	TWA	200 ppm 8 hours
	Methanol; Methyl alcohol	67-56-1	STEL	250 ppm 15 minutes
	Proprietary Nitroparafins		TWA	100 ppm 8 hours
Manufacturer	2-Ethylhexyl nitrate	27247-96-7	TWA	1 ppm 8 hours

Engineering measures : Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use only intrinsically safe electrical equipment approved for use in classified areas.

Eye protection : Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection : Gloves constructed of nitrile or neoprene are recommended. Consult manufacturer specifications for further information.

Skin and body protection : If needed to prevent skin contact, chemical protective clothing such as of DuPont TyChem®, Saranex or equivalent recommended based on degree of exposure. The resistance of specific material may vary from product to product as well as with degree of exposure.

Respiratory protection	:	A NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a NIOSH/ MSHA-approved positive-pressure supplied-air respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.
Work / Hygiene practices	:	Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Appearance	:	Clear, light yellow
Odor	:	Characteristic, fruity, ester
Flash point	:	60°C (140°F)
Auto Ignition temperature	:	Not determined
Thermal decomposition	:	May occur above 100 °C.
Lower explosive limit	:	Not determined
Upper explosive limit	:	Not determined
pH	:	Not applicable
Freezing point	:	Not determined
Boiling point	:	Not determined
Vapor Pressure	:	Not determined
Relative Vapor Density	:	Not determined

Density	:	0.83 g/cm3
Water solubility	:	Methanol and proprietary components are water miscible
Viscosity, kinematic	:	No data available
Percent Volatiles	:	100 %

SECTION 10. STABILITY AND REACTIVITY

Stability	:	May be unstable at temperatures greater than 100 °C (212 °F).
Conditions to avoid	:	Avoid temperatures above 50 °C, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.
Materials to avoid	:	Strong acids and oxidizing agents
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.
Hazardous reactions	:	Hazardous polymerization does not occur. Note: Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Skin irritation	:	Result: Mild skin irritation Prolonged skin contact may cause skin irritation and/or dermatitis.
Eye irritation	:	Result: Mild eye irritation The liquid splashed in the eyes may cause irritation and reversible damage. Strong lachrymation can make it difficult to escape.
Further information	:	Liver and kidney injuries may occur. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause irritation of respiratory tract.

Component:

Methanol; Methyl alcohol	67-56-1	Acute oral toxicity: LD50 rat Dose: 5,628 mg/kg Acute dermal toxicity: LD50 rabbit Dose: 15,800 mg/kg Acute inhalation toxicity: LC50 rat Dose: 64,000 mg/l Exposure time: 4 h Skin irritation: Classification: Irritating to skin. Result: Moderate skin irritation Prolonged skin contact may cause skin irritation and/or dermatitis.

		Eye irritation: Classification: Irritating to eyes. Result: Moderate eye irritation
2-Ethylhexyl nitrate	27247-96-7	Acute oral toxicity: LD50 rat Dose: 18.8 mg/kg Acute inhalation toxicity: LC50 rat Dose: 20.7 mg/l Exposure time: 4 h Skin irritation: Classification: Irritating to skin. Result: Mild skin irritation Eye irritation: Classification: Irritating to eyes. Result: Moderate eye irritation
Propriety Nitroparafin		Acute oral toxicity: LD50 rat Dose: 2,001 mg/kg Acute inhalation toxicity: LC50 rat Dose: 364 mg/l Exposure time: 4 h Skin irritation: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. Eye irritation: Classification: Irritating to eyes. Result: Mild eye irritation
Acetone	67-64-1	Acute oral toxicity: LD50 rat Dose: 930 mg/kg Acute inhalation toxicity: LC50 rat Dose: 44 mg/l Exposure time: 4 h Skin irritation: Classification: Irritating to skin. Result: Mild skin irritation Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product. Eye irritation: Classification: Irritating to eyes. Result: Risk of serious damage to eyes.

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations. Toxic to aquatic organisms.

Component:

Methanol; Methyl alcohol	67-56-1	Toxicity to fish: LC50 Species: Pimephales promelas (Fathead minnow) Dose: 29,400 mg/l Exposure time: 96 h Acute and prolonged toxicity for aquatic invertebrates: LC50 Species: Daphnia pulex (Water flea) Dose: 19,500 mg/l Exposure time: 18 h
Propriety Nitroparafins		Toxicity to fish: LC50 Species: Pimephales promelas (Fathead minnow) Dose: 278 mg/l

Exposure time: 96 h

Calculation indicates that other components in this formulation may cause long-term adverse effects on the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal : Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION

CFR

Proper shipping name	:	Flammable liquids n.o.s. (Methanol, 2-Ethylhexyl nitrate)
UN-No.	:	UN1993
Class	:	3
Packing group	:	II

TDG

Proper shipping name	:	Flammable liquids n.o.s. (Methanol, 2-Ethylhexyl nitrate)
UN-No.	:	UN1993
Class	:	3
Packing group	:	II

IATA Cargo Transport

UN UN-No.	:	UN1993
Description of the goods	:	Flammable liquids n.o.s. (Methanol, 2-Ethylhexyl nitrate)
Class	:	3 (6.1)
Packaging group	:	II
ICAO-Labels	:	3

IATA Passenger Transport

UN UN-No.	:	UN1993
Description of the goods	:	Flammable liquids n.o.s. (Methanol, 2-Ethylhexyl nitrate)
Class	:	3 (6.1)
Packaging group	:	II
ICAO-Labels	:	3

IMDG-Code

UN-No.	:	UN1993
Description of the goods	:	Flammable liquids n.o.s. (Methanol, 2-Ethylhexyl nitrate)
Class	:	3 (6.1)
Packaging group	:	II
IMDG-Labels	:	3
EmS Number	:	F-E S-D
Marine pollutant	:	Yes

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid
Moderate skin irritant
Moderate eye irritant
Highly toxic by ingestion

TSCA Status	:	Components on TSCA Inventory
DSL Status	:	All components of this product are on the Canadian DSL list.
SARA 311/312 Hazards	:	Fire Hazard Acute Health Hazard Chronic Health Hazard

SARA 313

		Product name	CAS	Concentration
Form R - Reporting requirements	:	Methanol	67-56-1	<80
Supplier notification	:	Methanol	67-56-1	<80

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State Regulations:

Connecticut Carcinogen Reporting: None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Methanol; Nitroparaffins;
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: The following components are listed: Methanol; Nitroparaffins;
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: The following components are listed: Methanol
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: Methanol; Nitroparaffins;
Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65

WARNING: This product contains chemicals known to the state of California to cause birth defects (or other reproductive harm). Avoid breathing exhaust fumes and vapors. Do not use products in an indoor facility or in any facility without adequate ventilation.

Nitroparafins

SECTION 16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by
CyberFuels, Inc.
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