

SAFETY DATA SHEET

Revision Date 01-31-2018

Version 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product Name:

DIESEL FUEL CONDITIONER

Other means of identification Common Name: UN/ID No Synonyms Product Categories

0105 NA1993 None Fuel additive

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions	Not applicable
Recommended Use	Restricted to professional users.
Uses advised against	Consumer use

Details of the supplier of the safety data sheet Supplier Address

MOC PRODUCTS CO., INC. 12306 Montague Street Pacoima, CA 91331

Emergency telephone number Company Phone Number Emergency Telephone

MOC PRODUCTS CO., INC. (818) 794-3500 CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation (Vapors)	Category 3
Germ cell mutagenicity	Sub-category 1B
Carcinogenicity	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 4

Label elements

Danger Hazard statements Toxic if inhaled May cause genetic defects Suspected of causing cancer May be fatal if swallowed and enters airways Combustible liquid Image: Compute the system of the sy

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep cool

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing Call a POISON CONTROL CENTER or doctor/physician IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician Do not induce vomiting In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Store in a dry place

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
 May be harmful in contact with skin
 Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Hydrotreated Light Petroleum	64742-47-8	80-90	*
Distillates			
2-Ethylhexyl Nitrate	27247-96-7	10-20	*
Heavy Aromatic Solvent Naphtha	64742-94-5	1-10	*
Light Aromatic Solvent Naphtha	64742-95-6	0.5-1	*
1,2,4-Trimethylbenzene	95-63-6	0.1-1	*
Naphthalene	91-20-3	0.05-0.5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES		
First aid measures		
General advice	If exposed or concerned: Get medical advice/attention.	
Skin contact	Wash with plenty of soap and water. Rinse immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse. If a person feels unwell or symptoms of skin irritation appear, consult a physician.	
Inhalation	Move to fresh air. Keep at rest position comfortable for breathing. Call a physician or Poison Control Center.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Check for and remove any contact lenses. Continue to rinse for at least ten minutes. Seek immediate medical attention/advice.	
Ingestion	Call a physician or Poison Control Center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If affected person is fully conscious, give one glass of water to drink. Risk of product entering the lungs on vomiting after ingestion. If vomiting occurs, the head should be kept low so vomit does not enter lungs. If unconscious, place in recovery position and seek medical attention immediately.	
Notes to Physician	Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours. Aspiration hazard if swallowed - can enter lungs and cause damage.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Headache, Dizziness, Nausea, Lowered blood pressure.	
Indication of any immediate medical attention and special treatment needed		
Self-protection of the first aider	Avoid breathing vapors or mists. Avoid contact with skin. No action shall be taken involving any personal risk or without suitable training. If it is suspected that vapors are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. It may be dangerous to the person providing first aid to give mouth-to-mouth resuscitation.	

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water spray (fog), foam, dry chemical or CO2.

Small Fire	Dry chemical or CO2.
Large Fire	Water spray or fog, Foam.
Explosive properties:	When heated above 100°C (212°F) may undergo a self accelerating, exothermic reaction
	which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature.

Specific hazards arising from the chemical

COMBUSTIBLE MATERIAL. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back. Flash back possible over considerable distance. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion productsCarbon monoxide, Carbon dioxide (CO2), Hydrocarbons, Nitrogen oxides (NOx).

<u>Specific methods:</u> Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Special firefighting procedures:

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Dike to collect large liquid spills. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not use water jet. Move containers from fire area if you can do it without risk. Water mist may be used to cool closed containers. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Avoid spreading burning liquid with water used for cooling purposes. Water may cause frothing of heated materials. Spray storage vessels with water to maintain temperatures below 100°C (212°F).

Component	ACGIH - test
Naphthalene	2.5
91-20-3 (0.05-0.5)	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions:	Keep people away from and upwind of spill/leak. Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	
Environmental precautions:	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Water runoff can cause environmental damage.
Methods and material for containm	ent and cleaning up
Methods for Containment	Dike far ahead of spill; use dry sand to contain the flow of material. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
Methods for clean-up:	Clean-up methods - small spillage: Use only non-sparking tools. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Clean-up methods - large spillage: Keep unnecessary personnel away. Dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
7. HANDLING AND STORAGE		
Precautions for safe handling		
Handling:	Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Protect from physical damage. Do not store at temperatures above 120°F (50°C). Keep containers tightly closed in a cool, well-ventilated place. Keep product and empty container away from heat and sources of ignition. Take precautionary measures against static discharge. Empty containers retain product residue and can be hazardous. Do not reuse empty containers. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.	
Conditions for safe storage, including any incompatibilities		
Technical measures/precautions:	Use only in area provided with appropriate exhaust ventilation. Eye wash and safety shower should be easily accessible.	
Materials to avoid:	Oxidizing agents, Strong reducing agents.	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
Hydrotreated Light Petroleum Distillates 64742-47-8	TWA: 200 ppm	TWA: 500 ppm	-
2-Ethylhexyl Nitrate 27247-96-7	-	Not established	-
Heavy Aromatic Solvent Naphtha 64742-94-5	-	TWA: 500 ppm	-
Light Aromatic Solvent Naphtha 64742-95-6	-	TWA: 100 ppm	-
1,2,4-Trimethylbenzene 95-63-6	TWA: 25 ppm	Not established	TWA: 25 ppm TWA: 125 mg/m ³
Naphthalene 91-20-3	S* TWA: 10 ppm	TWA: 10 ppm TWA: 50 mg/m³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³

Appropriate engineering controls

Engineering measures:

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Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit values. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

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Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear normal work clothing, Chemical resistant gloves. Additional body garments should be used based on task being performed: Chemical resistant suit, and boots; Face-shield, Chemical resistant apron. (consult with the specific manufacturer to confirm performance).
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Solution, Organic solvents Clear Light yellow	Odor Odor threshold	Petroleum No information available
Property	Values	Remarks • Method	
pH Molting point/freezing point	N/A No information available		
Melting point/freezing point Boiling point / boiling range	No information available °C / °F	No Data Available	
Flash point	65 °C / 149 °F	(based on components)	
Evaporation rate	05 0 / 143 1	(based on components)	
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
Upper flammability limit	No Data Available		
Lower flammability limit	No Data Available		
Vapor pressure	No Data Available		
Vapor density	No Data Available	Heavier than air	
Specific Gravity	0.82		
Water solubility	Insoluble in water		
Solubility in other solvents	No Data Available		
Partition coefficient	No Data Available		
Autoignition temperature Decomposition temperature	No Data Available No Data Available		
Kinematic viscosity	No information available		
Dynamic viscosity	No Data Available		
Explosive properties	No Data Available		
Oxidizing properties	No Data Available		
Other information			
Softening point	No Data Available		
Molecular weight	No Data Available		
VOC Content (%)			
VOC Content (%)	97		
Density	0.82 g/cc		
Bulk density	No Data Available		

10. STABILITY AND REACTIVITY

Reactivity

y Unstable at temperatures >100° C (212° F).

<u>Chemical stability</u> Stability	Decomposition starting from 100 °C.	
Possibility of Hazardous Reactions Hazardous polymerization	May react with oxidizing agents. Heating causes rise in pressure with risk of bursting. Hazardous polymerization does not occur.	
<u>Conditions to avoid</u> Heat, flames and sparks. High temperatures. Do not expose to temperatures above 100 °C.		
Incompatible materials		
Materials to avoid: Hazardous Decomposition Products	Oxidizing agents, Strong reducing agents. <u>s</u>	

Hazardous Decomposition Products Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons, Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Toxic if inhaled. May cause genetic defects. Suspected of causing cancer. May be fatal if swallowed and enters airways.
Inhalation	Toxic if inhaled.
Eye contact	Contact with eyes may cause irritation.
Skin Contact	May be harmful in contact with skin. Overexposure to organic nitrates by inhalation of vapor or skin contact may cause headache, dizziness, nausea, and decreased blood pressure.
Ingestion	May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated Light Petroleum Distillates 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h
2-Ethylhexyl Nitrate 27247-96-7	> 2000 mg/kg (Rat)	> 4820 mg/kg (Rabbit)	> 14 mg/L (Rat)4 h
Heavy Aromatic Solvent Naphtha 64742-94-5	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m³(Rat)4 h
Light Aromatic Solvent Naphtha 64742-95-6	-	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h, = 3400 ppm (Rat)4 h
1,2,4-Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat) = 8970 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³(Rat)4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat) = 490 mg/kg (Rat)	= 1120 mg/kg (Rabbit)> 20 g/kg (Rabbit)	> 340 mg/m³(Rat)1 h

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No informatio	on available.				
Mutagenic effects:	Substances v	Substances which should be regarded as being mutagenic to man.				
Carcinogenicity		The table below indicates whether each agency has listed any ingredient as a carcinogen:				
			ncer in animals, and are co			
	in man.					
Chemical Name	ACGIH	IARC	NTP	OSHA		
Naphthalene	A3	Group 2A	Reasonably Anticipated			
91-20-3		Group 2B				
Reproductive toxicity	Product is or	contains a chemical or che	emicals which is/are (a) kno	own or suspected		
	reproductive	hazard(s): Solvent Naphth	na, light aromatic (CAS#647	42-95-6). In the presence		
	of slight mate	ernal toxicity, fetotoxic effe	cts have been observed in t	the offspring of rats		
	exposed by in	nhalation.				
STOT - single exposure	Not classified	I.				
STOT - repeated exposu	re Not classified	1.				
Chronic toxicity		nic exposure to this mater	rial (or its components) may	v cause systemic toxicity.		
·····,		•	ng: kidney, liver, spleen, adr			
	central nervo		·9······, ····, ····, ····			
Target Organ Effects		Lungs, Skin, Eyes, Blood, Kidney, Liver, Spleen, Gastrointestinal tract (GI), Cardiovascular				
		er respiratory tract, Centra				
Neurological effects			may cause symptoms like	headache dizziness		
Neurological cheels		usea and vomiting.				
Other adverse effects			e. Literature data indicate th	at long-term inhalation		
Other adverse effects		ises blood effects in labora				
Achiration bazard	•	if swallowed and enters ai	•			
Aspiration hazard	way be latai	in swallowed and enters an	Tways.			
Numerical management of t		atian				
Numerical measures of t	Numerical measures of toxicity - Product Information					

The following values are calculated based on chapter 3.1 of the GHS document .ATEmix (oral)3942 mg/kg

ATEmix (dermal)	2184 mg/kg
ATEmix (inhalation-vapor)	5 mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical/chemicals which is/are listed as a marine pollutant(s) according to DOT.

Ecotoxicity

Toxic to aquatic life with long lasting effects.

17.1 % of the mixture	consists of compo	nent(s) of unknown	hazards to the ac	nuatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrotreated Light Petroleum Distillates 64742-47-8		45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L		
		LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static		
Heavy Aromatic Solvent Naphtha 64742-94-5		19: 96 h Pimephales promelas mg/L LC50 static 2.34: 96 h Oncorhynchus mykiss mg/L LC50 1740: 96 h Lepomis macrochirus mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 41: 96 h Pimephales promelas mg/L LC50		0.95: 48 h Daphnia magna mg/L EC50
Light Aromatic Solvent Naphtha 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50		6.14: 48 h Daphnia magna mg/L EC50
1,2,4-Trimethylbenzene 95-63-6		7.19 - 8.28: 96 h Pimephales promelas mg/L LC50 flow-through 7.72: 96 h Pimephales promelas mg/L LC50 flow-through		6.14: 48 h Daphnia magna mg/L EC50
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50	5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static		2.16: 48 h Daphnia magna mg/L LC50 1.96: 48 h Daphnia magna mg/L EC50 Flow through 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

This product contains components which may be persistent in the environment.

Bioaccumulation

Bioaccumulative potential.

 $\label{eq:mobility} \underbrace{\text{Mobility}}_{\text{The product is insoluble and floats on water.}}$

Chemical Name	Partition coefficient
Naphthalene	3.40
91-20-3	

13. DISPOSAL CONSIDERATIONS Waste treatment methods Dispose of in accordance with federal, state and local regulations. **Disposal of wastes Contaminated packaging** Do not reuse container. Dispose of in accordance with federal, state and local regulations. **14. TRANSPORT INFORMATION** Limited quantity (LQ) < 5 Liters DOT UN/ID No NA1993 Combustible liquids, n.o.s. (2-Ethylhexyl Nitrate, Petroleum Distillates), Marine Pollutant **Proper Shipping Name:** Hazard Class Comb. Liq. Packing Group: Ш This product contains a chemical/chemicals which is/are listed as a marine pollutant(s) Marine pollutant according to DOT. 128 **Emergency Response Guide** Number ΙΑΤΑ UN/ID No UN3082 **Proper Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (2-Ethylhexyl Nitrate) Marine Pollutant Hazard Class 9 Packing Group: Ш IMDG **UN/ID No** UN3082 **Proper Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (2-Ethylhexyl Nitrate) Marine Pollutant Hazard Class 9 **Packing Group:** Ш This product contains a chemical which is listed as a marine pollutant according to Marine pollutant IMDG/IMO

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 - Threshold Values %
1,2,4-Trimethylbenzene 95-63-6	95-63-6	0.1-1	1.0% de minimus concentration
Naphthalene 91-20-3	91-20-3	0.05-0.5	0.1 % de minimis concentration 0.1 % Supplier notification limit

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	Yes

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene 91-20-3	100 lb	Х	Х	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Naphthalene	100 lb 1 lb		RQ 100 lb final RQ
91-20-3			RQ 45.4 kg final RQ RQ 1 lb
			final RQ
			RQ 0.454 kg final RQ

State Regulations (RTK)

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Naphthalene	91-20-3	Carcinogen
Toluene	108-88-3	Developmental
Cumene	98-82-8	Carcinogen
Ethylbenzene	100-41-4	Carcinogen
Benzo[a]pyrene	50-32-8	Carcinogen
Benzene	71-43-2	Carcinogen
		Developmental

Male Reproductive

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Rating_ Health hazards 2 Flammability 2 Instability 1 Physical and Chemical Properties -<u>HMIS Rating</u> Health hazards 2* Flammability 2 Physical hazards 1 Personal protection B Chronic Hazard Star Legend *= Chro

* = Chronic Health Hazard

Prepared byEnvironmental Health and Safety DepartmentIssue Date01-31-2018Revision Date01-31-2018Revision NoteThis data sheet contains changes from the previous version in section(s): 4, 5, 6, 7, 8, 9, 10, 11, 15.Disclaimer

The information provided in this Material 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 a 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.

End of Safety Data Sheet