SAFETY DATA SHEET



DSL-5®/DIESEL FUEL ADDITIVE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: DSL-5®/DIESEL FUEL ADDITIVE

DATE: 2 June 2013 SUPERSEDES DATE: 15 May 2013

REVISION #: 4.1.1

MANUFACTURER: ENERGY ADDITIVES, INC.

ADDRESS: 117 Lillie Ave.

Battle Creek, MI, USA 49015

24/7 EMERGENCY PHONE: INFOTRAC 800-535-5053 Call collect internationally 352-323-3500

24/7 HEALTH EMERGENCIES: 800-222-1222 National Poison Control Center

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! FLAMMABLE/COMBUSTIBLE









GHS:

GHS SIGNAL WORD: DANGER

Keep away from ignition sources. Keep out of reach of children.

The product may be harmful if it is inhaled or swallowed. Avoid contact with eyes.

POTENTIAL HEALTH EFFECTS: CODE OF HAZARD STATEMENTS:

Physical hazards

H226, Flammable liquid and vapor

Health Hazards

H304, May be fatal if swallowed and enters airways.

H312, Harmful in contact with skin.

H315, Causes skin irritation.

H320, Causes eye irritation.

H333, May be harmful if inhaled.

H336, May cause drowsiness or dizziness.

Environmental hazards

H402, Harmful to aquatic life.

CODE OF PRECAUTIONARY STATEMENTS:

General

P101, Keep out of reach of children.

P103, Read label before use.

Prevention

P210. Keep away from heat/sparks/open flames/hot surfaces. NO SMOKING.

P233, Keep container tightly closed.

P234, Keep only in original container.

P242, Use only non-sparking tools.

P261, Avoid breathing fume/gas/mist/vapor spray.

P262 Do not get in eyes, on skin or on clothing.

P264, Wash thoroughly after handling.

P270, Do not eat, drink or smoke when using this product.

P280, Wear protective gloves/protective clothing/eye protection/face protection.

Response

P312, Call a POISON CENTER or doctor/physician if you feel unwell.

P331, DO NOT induce vomiting.

P340, Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P352, Wash with plenty of soap and water.

P362, Take off contaminated clothing and wash before reuse.

P381, Eliminate all ignition sources if safe to do so.

Storage

P403, Store in a well-ventilated area.

P412, Do not expose to temperatures exceeding 50 °C/122 °F.

ROUTES OF ENTRY: Eye contact, skin adsorption, ingestion and inhalation. **CARCINOGENICITY:** Naphthalene and Prop. C are listed by NTP or IARC.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS								
CHEMICAL NAME	CAS NUMBER	EINECS #	%	REACH Reg. #				
Petroleum distillate/	64742-478	265-191-7	< 35-55	Yes				
hydro treated light								
Solvent naphtha heavy aromatic	64742-94-5	265-198-5	< 10-30	Yes				
Prop. A	Prop.	Prop.	< 15-25	Yes				
Prop. B	Prop.	Prop.	< 3-7	Yes				
Prop. C	Prop.	Prop.	< 1-3	No				
Naphthalene	91-20-3	202-049-5	< 1-2	Yes				

SECTION 4 - FIRST AID MEASURES

INHALATION: Move to fresh air free from risk of further exposure. If person not breathing call 9-1-1, then apply rescue breathing. Seek medical attention as soon as possible.

EYE CONTACT: Flush with clean, lukewarm water raising upper and lower eyelids at low pressure for 15 minutes. Remove contact lenses, if present, after the first five minutes and continue to rinse the eyes. Seek medical attention if no relief.

SKIN CONTACT: Rinse area with clean water for 15-20 minutes. Call poison control center or doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice.DO NOT INDUCE VOMITING. Lower the head when person is vomiting to minimize entry into throat and lungs.

SECTION 5 - FIREFIGHTING MEASURES

FLASHPOINT AND METHOD: 109 °F (42.7 °C) **FLAMMABLE LIMITS**: LEL = 1.0 UEL = 6.0

EXTINGUISHING METHOD: Use dry chemicals, carbon dioxide and foam.

FIRE OR EXPLOSION HAZARDS: This material under complete combustion will form oxides of carbon and nitrogen.

SPECIAL FIREFIGHTING PROCEDURES: Keep upwind of fire. Full emergency equipment with self-contained breathing apparatus and full protective clothing to be worn by firefighters.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Wear PPE product is flammable. Keep away from sources of ignition. Avoid breathing vapor or mist. Isolate the area and prevent material from getting into waterways.

Absorb with vermiculite, sand or other inert absorbent and place the collected material in a closed container. Use non-sparking tools.

Finish cleaning the area with small amounts of soap and water on the spill area.

SECTION 7 - HANDLING AND STORAGE

STORAGE TEMPERATURE: Keep containers tightly and keep in cool dry area. Provide a cool well-ventilated area.

SPECIAL SENSITIVITY: Avoid contact with skin and eyes, wear PPE in section 8.

HANDLING AND STORAGE PRECAUTIONS: Avoid breathing the Vapor or mist. Use normal safety procedures and good personal hygiene. Wash thoroughly after use and before eating, drinking, chewing gum or using tobacco.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Use safety glasses or goggles, there is potential for Vapor or mist exposure to cause severe injury to the eyes.

SKIN PROTECTION: Wear chemical resistant glove (Nitrile.) Wear long sleeve shirts, long pants and shoes and socks.

RESPIRATORY PROTECTION: Wear respirator if the airborne conditions result in an aerosol forming. **OCCUPATIONAL EXPOSURE LIMITS OSHA PEL TWA:** Petroleum distillates, 400 ppm; Prop. B, 50 ppm; Prop. C, 100 ppm; and Naphthalene, 10 ppm

ENGINEERING CONTROLS: Provide adequate ventilation when product is used. Eyewash and shower should be provided in mixing and loading areas.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid. COLOR: Blue ODOR: Solvent odor. pH: NA

SOLUBILITY IN WATER: Not Soluble FLASH POINT: 109 °F (42.7 °C) VOLATILE ORGANIC CONTENT (VOC): 90% SOLUBILITY (WATER): Not soluble.

SPECIFIC GRAVITY (water=1): 0.8019 @ 68 °F (20 °C)

BOILING POINT: 318-356 °F (159-180 °C)

SECTION 10 - REACTIVITY

STABILITY: This product is stable material under normal conditions of storage and handling.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Ignition sources.

INCOMPATIBLES: Avoid strong oxidizing agents, acids and bases, and selected amines.

DECOMPOSITION PRODUCTS: Product will burn and the products of complete combustion are oxides of carbon and nitrogen.

SECTION 11 - TOXICOLOGICAL/ECOLOGICAL INFORMATION

Oral LD_{50 (rat)} = 813 $\overline{\text{mg/kg}}$

 $LC_{50 (rat)} = 700 \text{ mg/L (4-hr test)}$

The significant routes of exposure are eyes, skin, ingestion and inhalation.

SECTION 12 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This material is a liquid, wear PPE as outlined in Section VIII. Dispose according to the regulations of local, state and Federal regulatory agencies.

SECTION 13 - TRANSPORTATION INFORMATION

US DOT (ground) SHIPPING DESCRIPTION:

UN1268, Petroleum distillates, N.O.S., (Petroleum distillates, Solvent naphtha heavy aromatic), 3, III IATA (air) SHIPPING DESCRIPTION: CARGO AIRCRAFT ONLY

UN1268, Petroleum distillates, N.O.S., (Petroleum distillates, Solvent naphtha heavy aromatic), 3, III Use packing instruction 310, container capacity is 58.15 gallons (220 liters)

IMO (water) SHIPPING DESCRIPTION:

UN1268, Petroleum distillates, N.O.S., (Petroleum distillates, Solvent naphtha heavy aromatic), 3, III Use packing instructions P001 and LP01.

SECTION 14 - REGULATORY INFORMATION

OSHA STATUS: Flammable

UN Number: 1268 Hazard Class: 3

TSCA STATUS: Petroleum distillates.

CERCLA REPORTABLE QUANTITY: Naphthalene, 100 lbs.\ (220 kgs)

CALIFORNIA PROPOSITION 65: Naphthalene, cancer.

RCRA STATUS: Not regulated under RCRA

SARA 311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE Y FIRE Y SUDDEN RELEASE OF PRESSURE N

DELAYED Y REACTIVE N

SARA TITLE III: None.

SECTION 302 EXTREMELY HAZARDOUS: None. SECTION 311/312 HAZARD CATEGORIES: None.

SECTION 313 TOXIC CHEMICALS: Naphthalene and Prop.C.

RIGHT TO KNOW; Prop. C, are listed in MA, PA and NJ.

WHMIS: Class B3

Class D-2A

EUROPEAN COMMUNITY:





SECTION 15 - OTHER INFORMATION/APPROVALS

National Fire Protection Association (NFPA) Hazardous Materials Identification System (HMIS)

NFPA HMIS

0 Least

1 Health 1 Slight 1 Health

DSL-5®/DIESEL FUEL ADDITIVE

2	Flammability 2 Moderate		2	Flammability
0	Instability	3 High	0	Reactivity
	•	4 Severe	Н	PPE

SECTION 16 - ABBREVIATIONS /DISCLAIMER

REASON FOR ISSUE: Addition to Section 14, UN number and hazard class.

APPROVAL DATE: 3 June 2013

Control Act of 1086

PREPARED BY: Dennis Belau REVIEWED BY Lloyd Lack

DBelau@comcast.net

ABBREVIATIONS:

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	CAS#	Chemical Abstract Service Number		S European Inventory of existing ercial Chemical Sales		
	ōC	Celsius temperature scale	ºF	Fahrenheit temperature scale		
	Prop.	Proprietary	PE	Personal Protective Equipment		
	TLV	Threshold Limit Value		Time Weighted Average		
	STEL	Short-term Exposure Limit	PEL	Permissible Exposure Limit		
				National Institute of Safety & Health		
	NFPA	National Fire Protection Agency		Workplace Hazardous Materials Information		
		Transmar we recession rigeries		System		
	NTP	National Toxicology Program	IARC	Int. Agency for Research on Cancer		
	RCRA	Resource Conservation Recovery ACT	TSCA	Toxic Substance Control Act		
	EC ₅₀	Effective Dose	LC_{50}	Lethal Concentration		
	LD_{50}	Lethal Dose	CAS	Chemical Abstract Service Number		
	LEL	Lower explosive limit	UEL	Upper explosive limit		
	NDA	No Data Available		Number		
	ND	Not determined	NE	None established		
	NA	Not Applicable	<u><</u>	Less Than or Equal To		
	≥ CI	Greater Than or Equal To	CNS	Central Nervous System		
		China	DSL	Canada		
	ECL	Korean Existing Chemicals List	EEC	European Economic Commission		
	ENCS	Japanese Existing and New	EU	European Union		
	A 1994 S 1993 A	Chemical List	MAC	Netherlands		
	MAK	Germany	MITI	Japan		
		Philippines		Giftliste 1		
	UK	United Kingdom	USA	United States		
		Volatile organic content				
		GIH American Conference of Government Industrial Hygienists				
	SARA	Superfund Amendments and Reauthorization Act				

<u>Disclaimer: This information above is believed to be accurate and represents the best</u>

Taiwan List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances

Australian Inventory of Chemical Substances International Agency for Research on Cancer

information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particulars purposes. In no event shall Energy Additives, Inc. be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, how so ever arising, even if company has been advised of the possibility of such damages