



Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

IMPERIAL DEF

Product Number(s): Imperial Diesel Exhaust Fluid (DEF)

Company Identification

Imperial Sales Co.
7600 Dublin Blvd.
Suite 240
Dublin, CA 94568

Transportation Emergency Response

(24 hr): (925) 556-5530

Health Emergency

(925) 556-5530



Product Information

Product Information: 925-556-5530

MSDS Requests: 925-556-5530

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Urea	57-13-6	From 32 to 33 percent	N/E
Water	7732-18-5	From 67 to 68 percent	N/E

N/E – NONE ESTABLISHED

SECTION 3 HAZARDS IDENTIFICATION

Appearance

Colorless and clear liquid

Odor

None to slight ammonia

NFPA:

Health	Flammability	Reactivity
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HMIS:

1	0	0
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Key:

Minimal – 0, Slight – 1, Moderate – 2, Serious – 3, Severe - 4

Principal Hazards

CAUTION.

- Avoid contact with eyes, skin and clothing.
- Wash thoroughly after handling.

Minimum LD50 (Oral)

Not known

Minimum LD50 (Skin)

Not known

This material is not considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200. See Section 11 for complete health hazard information.

SECTION 4 FIRST AID MEASURES

Eyes	Immediately flush with water at least 15 minutes, lifting lower and upper lids. Contact lenses should never be worn when working with this chemical. Get medical attention as soon as possible.
Skin	Wash with plenty of soap and water. Immediately remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.
Inhalation	If respiratory difficulties develop, remove exposed person to fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties continue, oxygen should be administered by qualified personnel.
Oral	DO NOT INDUCE VOMITING. First aid is not normally required; however, if swallowed and symptoms develop seek medical advice.

Additional Notes to physician: None

SECTION 5 FIRE FIGHTING MEASURES

Flash Point	None to boiling
Extinguishing Media	CO2, dry chemical, or foam. Water Fog can be used to cool and protect exposed material.
NFPA RATINGS:	Health 1; Flammability 1; Reactivity 0.
Firefighting Procedures	For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
Unusual Fire & Explosion Hazards	Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Container may rupture on heating.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill Procedures	Evacuate all non-essential personnel. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Remove sources of ignition. Ventilate spill area. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Do not dispose in landfill. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.
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SECTION 7 HANDLING AND STORAGE

Handling Procedures. Keep away from potential sources of ignition. Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Do not discharge into drains or the environment; dispose to an authorized waste collection point. Use appropriate containment to avoid

environmental contamination. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.

Storage Procedures Do not store near potential sources of ignition. Store in well ventilated place.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	None established
Engineering Controls	Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.
Gloves Procedures	Use butyl rubber or neoprene gloves.
Eye Protection	Safety glasses. If potential for splash or mist exists, wear chemical goggles or face shield.
Respiratory Protection	Use NIOSH/MSHA approved full face respirator with a combination organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Clothing Recommendation	Long sleeve shirt is recommended. Wear either a chemical protective suit or apron when potential for contact with material exists. Use neoprene or butyl rubber boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	>212 °F
Explosion Data	Material does not have explosive properties.
Crystallization Point	12 °F
Vapor Pressure	Not applicable.
pH	Not determined.
Specific Gravity	1.09 (15.6 °C)
Pounds/ gallon	9.09
Water Solubility	Completely.
Odor	None to slight ammonia.
Appearance	Colorless and clear liquid.
Odor Threshold	Unknown.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

SECTION 10 STABILITY AND REACTIVITY

Stability	Material is normally stable at room temperature and pressure. See the Handling and Storage Section for further details.
Decomposition Temperature	Not determined.
Incompatibility	Avoid contact with strong oxidizing agents such as chlorine (bleach), peroxides, chromates, nitric acid, perchlorates, concentrated oxygen or permanganates. Contact can generate heat, fires, explosions and release toxic fumes.
Polymerization	Will not occur.
Thermal Decomposition	If involved in a fire, oxides of carbon and nitrogen may be generated; exposure to heat may generate ammonia fumes.
Conditions to Avoid	None known.

SECTION 11 TOXICOLOGICAL INFORMATION

-- ACUTE EXPOSURE --

Eye Irritation NDA
Skin Irritation NDA
Respiratory Irritation NDA

The following toxicology data is derived from urea as data is not available on other ingredients.

Dermal Toxicity The LD50 in rabbits is 8200 mg/kg

Inhalation Toxicity LC50 (4hr) in rats is N available

Oral Toxicity The LD50 in rats is 8471 mg/kg

Dermal Sensitization NDA

Inhalation Sensitization NDA

-- CHRONIC EXPOSURE --

Chronic Toxicity No data available to indicate product or components present at greater than 1% are chronic health hazards.

Carcinogenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

Teratogenicity No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

-- ADDITIONAL INFORMATION --

Other: None

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY: No data available.

ENVIRONMENTAL FATE: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.

SECTION 14 TRANSPORT INFORMATION

ICAO/IATA (US) Not regulated.
ICAO/IATA (International) Not regulated.
IMDG Not regulated.
IMDG EMS Fire Not applicable.
IMDG EMS Spill Not applicable.
IMDG MFAAG Not applicable.
IMO Marine Vessel ADDITIONAL INFORMATION REQUIRED
U.S. Barge ADDITIONAL INFORMATION REQUIRED
USCG Compatibility Not determined.
U.S. DOT Bulk
U.S. DOT Non-Bulk Not regulated.
DOT NAERG 128
TDG Bulk Not regulated.
TDG Non-Bulk Not regulated.
Mexico Not regulated.
Mexico Non-Bulk Not regulated.
Bulk Quantity 85000 liters, 22457 gal.
Non-Bulk Quantity 207.8 liters, 55 gal.
Review classification requirements before shipping materials at elevated temperatures

SECTION 15 REGULATORY INFORMATION

-- Global Chemical Inventories --

USA All components of this material are on the US TSCA Inventory or are exempt.

Other TSCA Reg. None

EU All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.

Japan All components are in compliance with the Chemical Substances Control Law of Japan.

Australia All components are in compliance with chemical notification requirements in Australia.

Canada All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

Switzerland All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Korea All components are in compliance in Korea.

Philippines All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

China All components of this product are listed on the Inventory of Existing Chemical Substances in China.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst. This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

SARA Section 313 This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

SARA 311 Classifications Acute Hazard No, Chronic Hazard No, Fire Hazard No, Reactivity Hazard No

CERCLA Hazardous Substances None known.

FDA Approval Not applicable.

-- State Regulations --

Cal. Prop. 65 This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: None

-- Product Registrations --

U.S. Fuel Registration Not applicable.

U.S. Dept of Agriculture This product has not been filed with the USDA to support H2 approvals.

NSF Nonfood Compounds

Registration This product has not been filed with the NSF to support H1 or H2 approvals.

Finnish Registration Number Not Registered
Swedish Registration Number Not Registered
Norwegian Registration Number Not Registered
Danish Registration Number Not Registered
Swiss Registration Number Not Registered
Italian Registration Number Not Registered
Korean Registration Number Not registered
New Zealand Registration Number Not registered
-- Other / International --

TDG Regulated Limit. None known.
U.S. Tariff Heading Number 3811.21.00.00
Schedule B Number 3811.21.0000

WHMIS Information: This product is not a WHMIS controlled product in Canada. All ingredients appear on the Domestic Substances List (DSL)

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0; (Least-O, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: Revision Date: 8/26/2010

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
OSHA - Occupational Safety and Health Administration	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
NTP - National Toxicology Program (USA)	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	IARC - International Agency for Research on Cancer

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by IPAC, 7600 Dublin Blvd, Suite 240, Dublin, CA 94568.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.