

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



ML876 DIESEL FUEL IMPROVER

Date of Issue: 18/06/2020

Page 1 of 7
Revision Date: 18/06/2020

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: **ML876 Diesel Fuel Improver**
Product Code: **ML876**
Recommended Use of Product: Multi-Functional Diesel Fuel Additive
Uses Advised Against: No Additional Information Available

1.2 Details of the supplier of the safety data sheet.

Company: **MAK LUBES INTERNATIONAL LTD**
Address: The Old Brewery, 2 Brewery Court, High Street
City: Theale, Reading RG7 5AH
Province: Berkshire, United Kingdom
Telephone: +44 (0) 7464 325169
E-mail: sales@mak-global.org
Web: www.mak-global.org

1.3 Emergency telephone no: **Toxicology Centre: +54 11 4 962 2247 / 6666**
(UK: during office hours only; Monday-Friday; 08:00-17:00) Tel: +44 (0) 7464 325169

SECTION 2: HAZARDS IDENTIFICATION.

Classification of the substance or mixture: FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
ASPIRATION HAZARD - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements:

Hazard pictograms:



Signal word: Danger

Hazard statements: Flammable liquid and vapor.
Causes skin irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention: Wear eye or face protection. Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards that do not lead to a classification: none known.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML876 DIESEL FUEL IMPROVER



Date of Issue: 18/06/2020

Page 2 of 7
Revision Date: 18/06/2020

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

Substance / mixture: mixture.
Other means of identification: not available.

Ingredient name	CAS number	%	GHS Classification
Aliphatic solvent	Mixture	70 - 80	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
Heavy aromatic solvent	Mixture	5 - 10	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
2-ethylhexyl-nitrate	27247-96-7	5 - 10	ACUTE TOXICITY (ORAL) - Category 4 ACUTE TOXICITY (DERMAL) - Category 4 ACUTE TOXICITY (INHALATION) - Category 4 AQUATIC HAZARD (LONG-TERM) - Category 2
2-ethyl-1-hexanol	104-76-7	5 - 10	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A ACUTE TOXICITY (INHALATION) - Category 4

SECTION 4: FIRST AID MEASURES.

Description of necessary first aid measures:

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: transfer the affected person to fresh air. If not breathing, perform artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If breathing is difficult, supply oxygen. Get medical attention if symptoms appear.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Most important symptoms / effects, acute or delayed:

Potential acute health effects:

Eye contact: no significant effects or critical hazards are known.

Skin contact: Causes skin irritation.

Inhalation: May cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion: May be fatal if swallowed and enters airways.

Over-exposure signs / symptoms: See Section 11.

Indication of immediate medical attention and special treatment needed, if necessary:

Notes to physician: treat symptomatically. Aspiration hazard if swallowed; aspiration into the lungs may cause chemical pneumonitis.

Specific treatments: there is no specific treatment.

Protection of first-aid personnel: no action shall be taken involving any personal risk or without adequate training.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



ML876 DIESEL FUEL IMPROVER

Page 3 of 7

Date of Issue: 18/06/2020

Revision Date: 18/06/2020

SECTION 5: FIREFIGHTING MEASURES.

Suitable extinguishing media: dry chemical powder, chemical foam or carbon dioxide to extinguish the flames. Use water spray to cool the containers exposed to the fire.

Unsuitable extinguishing media: do not use water jet.

Specific hazards arising from the chemical: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products: carbon dioxide, carbon monoxide, sulfur oxides, nitrogen oxides.

Special measures to be taken by firefighting teams: quickly isolate the area, evacuate all persons in the vicinity of the incident. No action should be taken that involves a personal risk or without proper training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus with full face-piece operating in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

Personal precautions, protective equipment and emergency procedures:

For personnel who are not part of the emergency services: no action should be taken that involves a personal risk or without adequate training. Evacuate the surroundings. Do not allow the entry of unnecessary and unprotected personnel. Do not touch or walk through spilled material. Wear appropriate personal protective equipment. Shut off all ignition sources. No flares, smoking or flames in hazard area.

For emergency personnel: if special elements are needed to manage the spill, take into account the information indicated in Section 8.

Environmental precautions: avoid dispersion of spilled material, its contact with soil, drains, surface water and groundwater. Inform the relevant authorities if the product has caused environmental contamination.

Methods and material for containment and cleaning up:

Small spill: stop the leak if this does not represent any risk. Remove the containers from the spill area. Absorb with a dry inert material and place in appropriate containers for special waste. Use spark-proof tools and explosion-proof equipment. Dispose by an authorized special waste operator.

Large spill: stop the leak if this does not represent any risk. Remove the containers from the spill area. Prevent the product from entering sewers, water courses, basements or small areas. Wash spills to an effluent treatment plant or proceed as indicated below. Stop and collect spills with non-combustible absorbent materials, such as sand, earth, vermiculite or diatomaceous earth, and place in appropriate containers for special waste. Use spark-proof tools and explosion-proof equipment. Dispose by an authorized special waste operator.

Reference to other sections: See Section 8.

SECTION 7: HANDLING AND STORAGE.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Information regarding occupational hygiene: eating, drinking or smoking should be prohibited in the places where this product is handled, stored or treated. Workers should wash their hands and face before eating, drinking or smoking. Remove protective equipment and contaminated clothing before entering areas where you eat.

Conditions for safe storage, including possible incompatibilities: keep in accordance with current regulations. Store in the original, tightly closed container, protected from direct sunlight in a dry, cool and well-ventilated area, separated from incompatible materials (see Section 10) and food and drink.

Eliminate all ignition sources. Open containers should be closed perfectly and kept in an upright position. Do not store in unlabeled containers.

Specific end use(s): no additional data.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



ML876 DIESEL FUEL IMPROVER

Page 4 of 7

Date of Issue: 18/06/2020

Revision Date: 18/06/2020

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

Control parameters:

Occupational exposure limits:

Component	Exposure limit
Aliphatic solvent	ACGIH (USA) – TWA: 100 ppm
Heavy aromatic solvent	ACGIH (USA) – TWA: 25 ppm

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation equipment or work processes must be checked to verify that they meet the requirements of environmental legislation.

Individual protection measures:

Hygiene measures: wash hands, forearms and face completely after handling chemical products, before eating, smoking and using the sink and at the end of the work day. Use appropriate techniques to remove contaminated clothing. Wash contaminated clothing before reuse. Verify that the eyewash stations and safety showers are near the work stations.

Eye / face protection: safety eyewear complying with approved standards should be worn when a risk assessment indicates that this is necessary. If contact is possible, safety glasses with side protection should be used, unless the rating indicates a higher degree of protection.

Skin protection:

Hand protection: If a risk assessment indicates that it is necessary, chemically resistant and impenetrable gloves that meet approved standards should be worn whenever chemical products are handled.

Body protection: before using this product personal protective equipment for the body should be selected based on the task to be performed and the risks involved and should be approved by a specialist.

Another type of skin protection: you must choose the right footwear and any other necessary skin protection measure depending on the task carried out and the risks involved. Such measures must be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

Physical state: liquid.

Color: amber.

Odor: soft, characteristic.

Odor threshold: not available.

pH: not applicable.

Melting point / freezing point: not available.

Boiling point: not available.

Flash point: > 40 °C (closed cup).

Evaporation rate: not available.

Flammability (solid, gas): not applicable.

Flammability or explosive limits: LEL: 1,1% ; UEL: 6,0 % (approximate data).

Vapor pressure: not available.

Vapor density: not available.

Relative density: 0,82

Solubility: insoluble in water.

Partition coefficient n-octanol / water: not available.

Autoignition temperature: not available.

Decomposition temperature: not available.

Viscosity: not available.

Other information: no additional information available

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML876 DIESEL FUEL IMPROVER



Date of Issue: 18/06/2020

Page 5 of 7
Revision Date: 18/06/2020

SECTION 10: STABILITY AND REACTIVITY.

Reactivity: there is no available test data on the reactivity of this product or its components.

Chemical stability: under normal conditions of storage and use, the product is stable.

Possibility of hazardous reactions: under normal conditions of storage and use, no hazardous reactions occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials: oxidizing agents.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute toxicity: not available.

Skin corrosion / irritation: Causes skin irritation.

Serious eye damage / eye irritation: not available.

Respiratory or skin sensitization: not available.

Mutagenicity: not available.

Carcinogenicity: not available.

Reproductive toxicity: not available.

Specific target organ toxicity - Single exposure: May cause drowsiness or dizziness.

Specific target organ toxicity - Repeated exposure: not available.

Aspiration hazard: May be fatal if swallowed and enters airways.

Information on the likely routes of exposure: skin, eyes, ingestion, inhalation.

Potential acute health effects:

Eye contact: no significant effects or critical hazards are known.

Skin contact: Causes skin irritation.

Inhalation: May cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion: May be fatal if swallowed and enters airways.

Symptoms related to physical, chemical and toxicological characteristics:

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness.

Skin contact: Adverse symptoms may include the following: irritation, redness.

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Ingestion: Adverse symptoms may include the following: nausea or vomiting.

Immediate and delayed effects, as well as chronic effects produced by a short and long term exposure:

Short-term exposure:

Possible immediate effects: not available.

Possible delayed effects: not available.

Long-term exposure:

Possible immediate effects: not available.

Possible delayed effects: not available.

Potential chronic health effects:

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity: no known significant effects or critical hazards.

Mutagenesis: no significant effects or critical hazards are known.

Teratogenicity: no known significant effects or critical hazards.

Developmental effects: no significant effects or critical risks are known.

Fertility effects: no significant effects or critical risks are known.

Numerical measures of toxicity: not available.

Interactive effects: not available.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML876 DIESEL FUEL IMPROVER



Date of Issue: 18/06/2020

Page 6 of 7
Revision Date: 18/06/2020

SECTION 12: ECOLOGICAL INFORMATION.

Toxicity: Toxic to aquatic life with long lasting effects.
Persistence / degradability: not expected to be readily degradable.
Bioaccumulative potential: not available.
Mobility in the soil: not available.
Results of PBT and vPvB assessment: not available.
Other adverse effects: not available.

SECTION 13 DISPOSAL CONSIDERATIONS.

The generation of waste should be avoided or minimized wherever possible.

Waste:
Dispose safely, in accordance with current legislation (Law 24,051).

Contaminated packaging:
Dispose in a safe manner, in accordance with current legislation (Law 24,051).

SECTION 14: TRANSPORT INFORMATION.

National and International Regulations:

Land (DOT):
UN-No: UN1268
Proper Shipping Name: Petroleum distillate, n.o.s.
Hazard Class: 3
Packing Group: III

Sea (IMDG):
UN-No: UN1268
Proper Shipping Name: Petroleum distillate, n.o.s.
Hazard Class: 3
Packing Group: III
Marine Pollutant: Yes

Air (IATA):
UN-No: UN1268
Proper Shipping Name: Petroleum distillate, n.o.s.
Hazard Class: 3
Packing Group: III
Special precautions for user: not applicable.

Transport in bulk according to Annex II of Marpol and the IBC Code: not available.

SECTION 15: REGULATORY INFORMATION.

Law 19,587 and Regulatory Decrees; current provincial and / or municipal legislation.
Law 24,051 and Regulatory Decrees; current provincial and / or municipal legislation.
Law 24,449 and Regulatory Decrees; current provincial and / or municipal legislation.

Chemical safety assessment: no chemical safety assessment has been carried out.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML876 DIESEL FUEL IMPROVER



Date of Issue: 18/06/2020

Page 7 of 7
Revision Date: 18/06/2020

SECTION 16: OTHER INFORMATION.

Classification of the degree of risk according to NFPA 704:

Health: 2
Flammability: 2
Reactivity: 0
Special: -

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.