

 INDUSTRIJA NAFTE, d.d.	SAFETY DATA SHEET	Issue: 6/1/08
	Product: FUEL OIL EXTRA LIGHT - FO EL	Page: 1 / 6

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

Product name and code:	FUEL OIL EXTRA LIGHT, FO EL;	1000056
	FUEL OIL EXTRA LIGHT with 0.2 %S;	1000057
	FUEL OIL EXTRA LIGHT with 0.3 %S;	1000058
Product use:	For use at home and in industry (for devices with evaporation burners and dispersive burners, without possible fuel pre-heating).	
Producer/supplier:	INA-INDUSTRIJA NAFTE, d.d.	
Address:	Avenija Većeslava Holjevca 10, p.p. 555, 10002 Zagreb, HRVATSKA Phone 00-385 1 64 50 842 / 385 1 64 51 075 (0 – 24 h) Fax 00-385 1 64 52 050	
Emergency Service Telephone Number:	112	

2. COMPOSITION / INFORMATION ABOUT INGREDIENTS

Substance:		Preparation:	X		
Chemical name of substance:					
CAS No.:	68334-30-5				
Chemical composition of preparation (concentration/range)	Fuel with additives or indicators for improving application characteristics.				
EEC index:	649-224-00-6				
Components contributing to product hazardousness:					
Component	v/v % (concentration)	EINECS/CAS	Hazard symbol	Risk phrases	Safety phrases
Fuel oil extra light, LU EL	< = 100	269-822-7/68334-30-5	Xn, N Carc. kat. 3	R: 40-65-66-51/53	S: (2-)/36/37-61-62

3. HAZARDS IDENTIFICATION

The most important hazards and effects:	
Human health effects:	There are limited findings on cancerous effects. Harmful: may cause lung damage if ingested. Frequent exposure may cause skin dryness or cracking.
Environmental hazards:	Toxic to aquatic organisms, may have long-term adverse effect in water.
Physical/chemical hazards:	Vapours may displace air from a confined environment. May form explosive mixture with air at flash point temperature or higher (above 55 °C).
Special hazards:	See Item 10.
Main symptoms of effects:	
Inhalation:	Headache, nausea, dizziness. During longer exposure to vapours by inhalation can lead to fainting and hypoxia, if the concentration of oxygen drops below 17%.
Skin:	Irritating and defatting effect, possibly accompanied by redness and/or dermatitis.
Eyes:	Irritating effect possibly accompanied by redness.
Ingestion:	Mucous membrane irritation, nausea, vomiting and risk of lung oedema due to lung aspiration.
Overview of special conditions:	None.

4. FIRST-AID MEASURES

First-aid procedures:	
Inhalation:	Remove the person to fresh air and place them in a half-lying position. In case of fainting transport the afflicted person in lateral position to the hospital paying attention to the free passing of the air through the respiratory tract. If breathing has stopped or is difficult, administer artificial respiration and/or apply heart massage and immediately seek medical assistance.
Skin contact:	Remove soaked clothing and shoes and flush the contact points thoroughly with water and soap for at least 15 to 20 minutes. In case redness occurs seek medical advice.

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Eye contact:	Hold eyelids apart with clean hands and flush the eyes with running water for at least 15 to 20 minutes. May cause lung damage. In case of intense redness, burning sensation or tearing, seek ophthalmologist's advice.
Ingestion:	DO NOT induce vomiting! Place the afflicted person in half-lying position and transport to hospital.
Note to first-aid/physician:	No special recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable:	Heavy air foam (alcohol-based foaming agent) for larger fires. Dry powder and CO ₂ for smaller fires.
Not suitable:	Water jet.
Fire-fighting measures for special hazards:	Eliminate all sources of ignition, call the fire brigade and the police. Pay special attention to risk of explosive vapour-air mixture formation at temperatures above the flash point.
Special fire-fighting measures:	Use of water mist and water spray for cooling the surfaces exposed to heat and for protection of persons. Only persons trained in fire-fighting may use the water spray (sprayed water).
Fire-fighting special safety equipment:	Self contained open circuit compressed air breathing apparatus (HRN EN 137/AC:2008), protective suit against heat irradiation.
Special exposure hazards:	Vapours are heavier than air and may settle to ground level and in dents; they may spread away from the accident site and cause explosion and fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution:	Ventilate thoroughly the premises at risk. Display a visible sign prohibiting entrance, use of open flame and sparking devices. Do not smoke. Stand upwind from the spill site. Use means of personal protection mentioned under Item 8.
Environmental precautions:	Mark out the contaminated area with signs and prevent leaks and spills into watercourses, channels, drainage systems and soil by digging a protective ditch, setting up partitions made of bags of dry sand, soil or clay. Ensure good ventilation. In case of larger spills notify the communication unit at 112.
Methods for cleaning-up and recovery:	Pump the product from the damaged tank into an empty tank - container with the pump designed for use in potentially explosive atmosphere. Absorb the remainders with absorbents (sawdust, sand, mineral adsorbents and other inert materials). Store the waste material and contaminated surface layer of soil that was removed in closed containers in well-ventilated premises. Hand over for disposal to legal entities for hazardous waste disposal, authorised by the Ministry in charge of environmental protection.
Additional warnings:	In case of traffic accident, properly ground the tank truck, mark the accident area and call the responsible person and the expert service in charge of taking care of the consequences of the accident.

7. HANDLING AND STORAGE

Handling:	
Safety precautions:	Keep away from heat sources and eliminate all ignition sources. Perform loading/unloading only in properly facilitated areas, at the same time ensuring sufficient air ventilation/exhaustion. Use only fully operational equipment and devices. Make sure that the floor in the work premises and storage area is impervious and stable to solvents. Ground the devices and take precautions against static electricity.
Safe handling advice:	Smoking, eating, drinking or storing food is prohibited in the room where this product is being handled. Keep personal clothes away from work clothes and workplace. The prescribed work clothes, protective gloves and goggles must be worn. Do not use sparking tools or devices.
Storage: technical measures and storage conditions:	
Suitable:	Store in properly designed and well-closed containers/tanks. Take precautions against electrostatic discharge. Make sure that receiving tank farms are below the self-supporting tanks.
To be avoided:	Storage areas containing other chemicals especially flammable ones.

Packaging materials:

Recommended:	Original as made by the tank manufacturer.
Not suitable:	Do not decant into replacement, damaged or inadequate tanks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures for reducing exposure:	Ensure good air ventilation/exhaustion in the work premises.
Control parameters: Oxygen concentration in the air must not drop below 18%.	

Hazardous substance	Maximum allowed concentration ppm	Biological limit values ppm
none		

Personal protective equipment:

Respiratory protection:	Wear full face protective mask (HRN EN 136/AC:2006). Wear self-contained, open-circuit compressed-air breathing apparatus (HRN EN 137/AC:2008) during fire.
Hand protection:	Wear protective gloves made of stable and impervious material such as nitrile rubber or viton (HRN EN 374-1; HRN EN 374-2; HRN EN 374-3).
Eye protection:	Protective goggles or a visor at lower concentrations, protective mask at higher concentrations.
Skin and body protection:	Protective clothing and footwear, nitrile rubber apron, chemical-resistant overalls.
Special hygienic and safety precautions:	Maintain the prescribed hygiene standards for working with hazardous substances. Remove contaminated clothing and footwear. Inspect the equipment and devices regularly and maintain with running water. Smoking, eating and drinking is prohibited during handling this product. Wash hands before each work break.
Additional warnings:	None.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

State:	liquid	Colour:	red	Odour:	very mild, characteristic of hydrocarbons.
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Chemical properties

Characteristics	Unit	Values	Method	Note
pH value:				not applicable
Boiling point/Boiling range:				
- initial:	°C	180	HRN EN ISO 3405	
- 95 v/v % redistilled to:		370		
Flash point:	°C	>55	HRN EN ISO 2719	
Flammability:	°C	not flammable		from literature
Auto-ignition temperature:	°C			not applicable
Explosive properties:	v/v vol. %	0.6 – 6.5		from literature
Oxidizing properties:				not applicable
Vapour pressure:	kPa			not applicable
Density (15 °C):	kg/m ³	≤ 860		from literature
Solubility in water:	g/L	negligible		from literature
Solubility in organic solvents or oils:	g/L			not applicable
Distribution coefficient n-octanol / water:	- log Pow	3.9-6		from literature
Viscosity (at 20 °C):	mm ² /s	2.5 – 6.0	HRN EN ISO 3104	from literature
Vapour density:	kg/m ³			not applicable

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Volatility:	kPa		not applicable
Miscibility with other substances:			not applicable
Conductivity:			not applicable
Melting point/Melting range:	°C		not applicable
Gas group:			not applicable

10. STABILITY AND REACTIVITY

Stability:	Stabile at prescribed storage and use conditions.
Conditions to avoid:	Sources of heat, open flame and sparking.
Materials to avoid:	Strong oxidants.
Hazardous decomposition products:	Carbon oxides (CO, CO ₂), sulphur dioxide (SO ₂).

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	
Oral (LD ₅₀):	No data available.
Inhalation (LD ₅₀):	No data available.
Dermal (LD ₅₀):	No data available.
Local effects:	
Skin irritation:	Redness, dermatitis.
Eye irritation:	Irritating effect possibly accompanied by redness.
Dermal sensitivity:	Sensitive people may experience redness and dermatitis.
Chronic poisoning or long exposure:	Frequent exposure may cause skin dryness and cracking.
Exposure effects:	
Single-term:	See Item 3.
Recurrent:	See Item 3.
Long-term:	Long-term exposure to vapours may cause feeling of intoxication, headache, urge to vomit, fainting.
Momentary effects:	
Delayed:	No data available.
Special:	No data available.

12. ECOLOGICAL INFORMATION

Mobility:	
Known or predicted distribution to environmental compartments:	No data available.
Surface tension:	No data available.
Soil absorption/desorption :	No data available.
Other physical/chemical properties:	See Item 9.
Persistence/degradability:	
Biotic or abiotic degradation:	No data available.
Aerobic or anaerobic degradation:	Some components evaporate and degrade when exposed to light.
Persistence:	No data available.
Bioaccumulation:	
Bioaccumulative potential:	No data available.
Bio-enhancement:	No data available.
Possible environmental impact:	
Water:	Floats on the surface and creates an oil slick that spreads quickly regardless of the wind and currents and can have an adverse effect to water organisms due to lack of oxygen.
Air:	Combustion releases carbon dioxide (CO ₂), carbon monoxide (CO), and in smaller quantities nitrogen oxides (NO _x) and sulphur oxides (SO _x) the sedimentation of which causes acidification, eutrofication and photochemical pollution.
Soil:	If larger quantities penetrate the soil there is a risk of groundwater contamination.

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Ecotoxicity:	
For aquatic organisms (EC 50):	No data available.
For algae (EC 50):	No data available.
For ground organisms:	No data available.
For plants and land animals:	No data available.
Other harmful effects:	No data available.



13. DISPOSAL CONSIDERATIONS

Preferred disposal considerations:	
Waste from residues:	There is no classic waste from this product except in case of unintentional release. For such cases see item 6. It is foreseen that contaminated residues be thermally treated.
Contaminated packaging :	Not applicable.
Local disposal regulations:	Waste Act (OG 178/04, OG 111/06, OG 60/08); Regulations on Waste Type (OG 27/96); Regulations on the conditions of waste treatment (OG 123/97, NN 112/01); Decree on conditions for hazardous waste treatment (OG 32/98); Decree on Waste Categories, Types and Classification with Waste Catalogue and List of Hazardous Waste (OG 50/05); Regulations on Waste Oil Management (OG 124/06, OG 121/08).

14. TRANSPORT INFORMATION

Transport classification sign:	
Road (ADR):	class: 3, classification code: F1, packing group: III
Rail (RID):	class: 3, classification code: F1, packing group: III
Water (ADNR):	class: 3
Sea (IMDG):	class: 3
Air (IATA –ICAO):	-
UN classification code:	1202
Additional regulations:	Hazardous Substance Transport Act (OG 79/07); Regulations on the Manner of Hazardous Substances Transport in Road Traffic (OG 2/02, OG 9/02, OG 53/06); Regulations on Hazardous Substances Handling, Conditions and Manner of Maritime Transportation, Loading and Unloading, in Bulk and Other Cargo in Ports, and Manner of Preventing Spilled Oil Spreading in Ports (OG 51/05).
Special precautions and conditions:	

15. REGULATORY INFORMATION

Applicable regulations:	Act on Chemicals (OG 150/05, OG 53/08); Decree on the Quality of Liquefied Petroleum Fuels (OG 53/06); Decree on Limit Values of Pollutants into the Air from Stationary Sources (OG 21/07); INA N 02-024.
Information on hazards and safety risks:	
Hazard symbol:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> Xn  HARMFUL </div> <div style="text-align: center;"> N  ENVIRONMENTALLY DANGEROUS SUBSTANCE </div> </div>
Risk phrases: (for final product)	R 40 Limited evidence of a carcinogenic effect. R 65 Harmful: may cause lung damage if ingested R 66 Repeated exposure may cause skin dryness or cracking R 51/53 Toxic to aquatic organisms; May cause long-term adverse effects in the aquatic environment.

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Safety phrases: (for final product)	S 2 Keep out of reach of children. S 36/37 Wear suitable protective clothing; Wear suitable gloves. S 61 Avoid release to the environment. Refer to special instructions/safety data sheets S 62 If swallowed do not induce vomiting: seek medical advice immediately and show this container of label.
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16. OTHER INFORMATION

Risk phrases: (for ingredients)	-
Safety phrases: (for ingredients)	-
Literature:	1. http://www.upvh.hr 2. http://www.rcoop.com/product_pdfs/MSDS_diesel.pdf
Revisions:	Issue 6 of this SDS has been conformed to the requirements of Regulations on the Manner of Filling Out the Safety Data Sheet, OG 111/2006, OG 39/08 and EU Directive 2001/58/EC. Compared to Issue 5, Issue 6 includes the following revisions: <ul style="list-style-type: none"> - change of risk and safety phrases in item 2, - amendment to the data in item 9, - change of the data in item 12 under „Biotic or abiotic degradation“, - change of legal provisions in item 14, - change of warning/safety labels in item 15.
Note:	Safety Data Sheet (SDS) is drawn up on the basis of present knowledge and legislation in force at the moment of launching the product onto the market. Product is described on the basis of its safety data. The use of product for purposes other than those indicated above as well as its use with other materials during treatment process may cause hazards that are not described in this SDS.