
Product	NATURAL PETROL	Date:	5/10/2015
		Edition:	7

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

1.1. Product identifier

- Trade name: NATURAL PETROL
- Chemical name: Natural petrol
- EC index no.: 649-261-00-8
- EC no.: 232-349-1
- CAS no.: 8006-61-9
- Registration No.: This substance is not subject to registration in accordance with Annex V. of Regulation (EC) No. 1907/2006 (REACH).
- Product code: 1000035

1.2. Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified uses: Energy source, raw material in chemical industry.
- Uses advised against: The uses that are in the list above are relevant. Other uses are not recommended unless an assessment that proves that the related risks are controlled has been conducted before starting that use

1.3. Details of the supplier of the safety data sheet

- Manufacturer/supplier: **INA-Industrija nafte, d.d.**

Address: Av. Većeslava Holjevcica 10
pp 555, 10002 Zagreb, HRVATSKA

Phone: 00-385-1-6450-842 / 00-385-1-6451-075 (24 h)

Fax: 00-385-1-6452-050

e-mail: sds@ina.hr

- Responsible person: **Sustainable Development and Health, Safety and Environment Sector**
Mirela Mavrinac, B. Sc.
Hrvoje Raukar, B. Sc.
Tel. 00-385-1-6450-803

1.4. Emergency Telephone Number

- Emergency Service Telephone Number: **112**
National Protection and Rescue Directorate
Nehajska 5, 10000 Zagreb
e-mail: info@duzs.hr
00-385-1-3650-011
00-385-1-3650-084
00-385-1-3650-082
00-385-1-3650-083
- Medical Information Telephone Number: **00-385-1-23-48-342**

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP/GHS):

Flam. Liq. 2; H225

Asp. Tox. 1; H304

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Skin Irrit.2 ; H315
STOT SE 3; H336
Mut. 1B; H340
Carc. 1B; H350
Repr. 2; H361
Aquatic. Chronic 2; H411

Full text of H-phrases: See section 16.

2.2. Substance or mixture labelling

2.2.1. Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS):

Hazard pictograms:



GHS02

GHS07

GHS08

GHS09

Signal word: **Danger**

Hazard statements (H):	H225	Highly flammable liquid and vapour.	
	H304	May be fatal if swallowed and enters airways.	
	H315	Causes skin irritation.	
	H336	May cause drowsiness or dizziness.	
	H340	May cause genetic defects.	
	H350	May cause cancer.	
	H361	Suspected of damaging fertility or the unborn child.	
	H411	Toxic to aquatic life with long lasting effects.	
	Precautionary statements (P):	P201	Obtain special instructions before use.
		P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
		P273	Avoid release to the environment.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
		P331	Do NOT induce vomiting.
P301+ P310		IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
P403+ P233	Store in a well-ventilated place. Keep container tightly closed.		

2.3. Other hazards

The product does not meet the criteria for PBT or vPvB classification in Annex XIII of REACH.

Note OIN 4

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Classification of substance according to CLP Regulation, as flammable liquid category 1 should not be applied if it is possible to establish that the flash point and initial boiling point comply with the CLP classification criteria as flammable liquid category 2 or 3.

3. COMPOSITION / INFORMATION ON INGREDIENTS

-Substance:	X			Mixture:	
- Components contributing to product hazardousness:					
Substance name	Substance identification			[%]	Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)
	CAS no.	EC no.	Registration no. (REACH)		
Natural petrol	8006-61-9	232-349-1	Exempt from registration in accordance with Annex V of REACH	>85	Flam.liq. 1; H224 Asp. tox. 1; H304 Mut. 1B; H340 Carc. 1B; H350
Benzene*	71-43-2	200-753-7	-	<5	Flam. Liq. 2; H225 Carc. 1A; H350 Mut.1B; H340 STOT RE 1; H372 Asp. tox. 1; H304 Eye Irrit. 2; H319 Skin Irrit. 2; H315
Toluene*	108-88-3	203-625-9	-	<3	Flam. Liq. 2; H225 Repr. 2; H361d Asp. tox.1; H304 STOT RE 2; H373 Skin irrit.2; H315 STOT SE 3;H336
Ethylbenzene*	100-41-4	202-849-4	-	<0,3	Flam. Liq. 2; H225 Ac. tox. 4 ; H332
m-xylene* p-xylene*	108-38-3 106-42-3	203-576-3 203-396-5	-	< 1	Flam. Liq. 3; H226 Ac. tox. 4; H332 Ac. tox. 4; H312 Skin Irrit. 2; 315
o-xylene*	95-47-6	202-422-2	-	< 0,2	Flam. Liq. 3; H226 Ac. tox. 4; H332 Ac. tox. 4; H312 Skin Irrit. 2; 315

* These components were not added on purpose but are reported as important for classification

4. FIRST AID MEASURES

- General information:
- First aid procedures

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- after inhalation: Afflicted person shall be taken to fresh air. If heavy breathing is noticed or in case of headache, dizziness, nausea, and permanent distress, seek medical advice. In case of fainting, transport the person to hospital lying on the side, ensuring free passage through respiratory tract.
- after skin contact: Remove polluted clothing and footwear and dispose in safe manner. Affected area should be rinsed with soap and water. In case of irritation, swelling and redness seek medical advice. In case of injuries caused by use of products under pressure, immediately seek medical advice.
- after eye contact: Keep the lids apart with clean hands and flush with a mild jet of running water for 15-20 minutes. In case of intense redness, burning sensation or tears, seek the oculist's assistance.
- after ingestion: DO NOT provoke vomiting! Flush the mouth with water and spit out. Place the afflicted person in half-lying position and transport to hospital.
- **Note to person administering first aid/ physician:** Proceed according to medical care instruction in case of poisoning with easily volatile solvents. Pay attention during vomiting, because pulmonary oedema may occur.

5. FIRE FIGHTING MEASURES

- Extinguishing media:

- SUITABLE: Fire fighting foam, fire fighting dry powder, water, mist and CO₂ (for closed areas).
When using dry powder and CO₂ (for initial fires, minor fires and indoor fires) attention is to be paid to the hazard of possible repeated flaring up of the fire after extinguishing.
- NOT SUITABLE: Do not use direct water jets as they could cause a steam explosion and spread of the fire.

- Fire fighting measures for special hazards:

Remove all ignition sources and, if necessary, call firemen and the police.
Special care should be taken of the fact that there is a permanent danger of creation of explosive mixture with the air at room temperature.
Carbon monoxide - CO may be evolved if incomplete combustion occurs.

- Special fire fighting measures:

Use sprayed water for cooling containers, equipment and access to fire site. Use of water mist and water spray for cooling surfaces of undamaged containers exposed to heat and for protection of persons. Only personnel trained in fire-fighting may use water spray (dispersed water). Simultaneous use of foam and water on the same surface is to be avoided as water destroys firefighting foam.

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- Special fire fighter equipment:** Protective fire fighter's clothing must be approved to the standard (EN 469).
Protective equipment with separate air supply approved to the standard (HRN EN 137) must be worn to protect respiratory organs.
- Special hazards of exposure:** Vapours, being heavier than air, remain close to the ground and in recesses. Spreading along the ground and away from the source and their accumulation in flammable concentrations, as well as on surface water is possible.
- Other information:** In case of fire, keep adjacent containers with flammable liquids cool by spraying with water.
If the fire cannot be extinguished quickly, the only course of action is to evacuate the safety zones.
In case of damage it is necessary to take action to prevent the hazardous substance and its residues at affected sites from entering drains, sewers, rivers, sea.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Apply personal protective equipment from item 8, and immediately remove the unprotected persons from the contaminated area. Endangered areas shall be thoroughly ventilated. Signs shall be placed at visible points prohibiting entry and work with open flame and sparking devices. Petrol concentrations in air shall be measured according to regulations. Stand upwind in respect of the outlet point.
- Environmental precautions:** Prevent leaking and discharging into water-courses, canals, drainage systems, and soil by digging protective ditches and fencing them with bags filled with dry sand, soil, or clay. Provide good ventilation of the area. In case of major leaks notify the communication unit at phone number 112.
- Methods for cleaning-up and recovery:** Pump the petrol from the damaged tank into an empty tank - container with the pump designed for safe use. Absorb the remainders from soil with absorbents (sawdust, sand, mineral adsorbents and other inert materials). Store the waste material and contaminated surface layer of soil that was removed in tightly closed containers and store in well-ventilated premises until disposal. Hand over for disposal to legal entities for hazardous waste disposal, authorised by the Ministry in charge of environmental protection.

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- Additional warnings:** Very easily inflammable liquid and vapours! Remove all possible ignition sources. In case of a traffic accident, the engine shall be turned off, the truck tanker properly grounded, the accident area marked, and a responsible person called, as well as the professional service taking care of the accident consequences.

7. HANDLING AND STORAGE

- Handling:

- safety precautions:** Keep away from heat sources and eliminate all ignition sources. Reload at the places designed, i.e. intended for the purpose, providing ventilation/air outlet. Use equipment/accessories in good working condition. Do not use sparking tools.

In work and storage areas, provide impermeable floor resistant to solvents. Floors in hazardous premises with explosive atmosphere in the system conducting static electricity away shall have transitional resistance of <1 MΩ. Devices shall be grounded and protective measures against static electricity shall be taken.

- safe handling advice:** Smoking, eating, and drinking is prohibited, as well as keeping food in the room where this product is handled. Personal clothes shall be kept separately from the working clothes and the workplace. Wearing the stipulated working clothes, protective gloves and goggles is obligatory.

- Storage: technical measures and storage conditions:

- SUITABLE:** Store in well-sealed tanks, properly manufactured and equipped, with provision of ventilation of premises and adequate temperature. Take measures against the occurrence of static electricity.

- TO BE AVOIDED:** Storage in the vicinity of water-courses and in the same premises as other chemicals, particularly those that may cause fire.

- Packaging materials:

- RECOMMENDED:** Prescribed for the intended purpose.

- NOT SUITABLE:** All other.

- Special use:** No data available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure limit values

Hazardous substance	Exposure limit values (Croatia) ppm	Biological limit values
petrols	100	-
benzene	1	0.12 ppm (in exhaled air, smoking increases the finding)

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ethylbenzene	100	2 ppm (in finally exhaled air) 1,50 mg/L (blood)
toluene	50	20 ppm (in finally exhaled air) 1,0 mg/L (in blood, at the end of work shift)
o-,m-,p-xylene	50	1,50 mg/L (in blood, alcohol consumption increases the finding)

- Monitoring procedures:

8.2. Exposure controls

- Summary of risk management measures: No data available.

8.2.1. Occupational exposure controls

- Description of operating procedure and technological control:

Provide good ventilation of the premises.

- Personal protective equipment

- respiratory tract protection: If the vapour concentration exceeds the exposure limit values, wear a protective mask (HRN EN 136) or a protective mask with filter "A" (HRN EN 14387), and if oxygen concentration drops below 17%, use the self-contained compressed-air breathing apparatus (HRN EN 137).
- hand protection: Wear protective gloves made of stable and impermeable material. In case of full contact wear gloves made of nitrile rubber, 0.40 mm thick; in contact with drops wear gloves made of nitrile rubber, 0.11 mm thick. In case of longer exposure use gloves made of viton (HRN EN 374).
- eye protection: Protective goggles (HRN EN 166).
- skin and body protection: Protective clothing made from natural fabrics and appropriate footwear, rubber boots (HRN ISO 10335).
- **Special hygienic and safety precautions:** Smoking, eating, and drinking are prohibited while handling this product. Hands shall be washed after each work interruption. Contaminated clothes and footwear shall be taken off. The workplace shall be equipped with a shower.

8.2.2. Environmental exposure controls

- Summary of risk management measures: No data available.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information:

- state: Liquid
- colour: Colorless
- odour: Characteristic

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9.2. Important health, safety and environmental information:

- pH value (indicate conc. and temp.):		Not applicable.
- boiling point/boiling range:	°C	46.8 – 139.7
- flash point:	°C	< - 46
- flammability (solid, gas):		Very easily flammable.
- explosive properties:	vol. %	1.4 – 7.6 (from literature)
- oxidizing properties:		Product does not have oxidizing properties.
- vapour pressure (at 40°C):	kPa	50 – 60
- density at 15 °C:	kg/m ³	680 – 700
- solubility (toluene, xylene):	g/L	Soluble.
- solubility in water:	g/L	Insoluble.
- partition coefficient octanol / water:	logPow	Not applicable.
- viscosity (kinematic) at 20 °C:	mm ² /s	0.4775
- vapour density at 15°C:	kg/m ³	No data available.
- volatility:		No data available.

9.3. Other data:

- melting point/melting range:	°C	49 – 177 (from literature)
- disintegration temperature:	°C	No data available.
- auto ignition temperature:	°C	278
- conductivity:	pS/m	4
- miscibility:		No data available
- pour point:	°C	< - 36

10. STABILITY AND REACTIVITY

- Stability:	Stable at prescribed conditions of use and storage.
- Conditions to avoid:	Remove all ignition sources, heat, and open flame.
- Materials to avoid:	Strong oxidants.
- Hazardous decomposition products:	None in normal work conditions and in case of proper storage.
- Special hazards:	No data available.

11. TOXICOLOGICAL INFORMATION

- Acute toxicity	
- oral (LD ₅₀):	> 5000 mg/kg (rat)
- inhalation (LC ₅₀):	> 5.610 mg/m ³ (rat)
- dermal (LD ₅₀):	> 2000 mg/kg (rabbit)
- Chronic exposure	
- oral (LD ₅₀):	No data available.

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- inhalation (LC ₅₀):	No data available.		
- dermal (LD ₅₀):	No data available.		
- Irritation/corrosion			
- skin:	Causes skin irritation.		
- eyes:	May cause skin dryness and prickling in sensitive persons.		
- respiratory tract:	May be lethal if swallowed and enters the respiratory tract.		
- Sensitisation			
- skin:	Does not cause sensitisation, testing conducted on guinea pigs.		
- respiratory tract:	High vapour concentrations may cause respiratory tract irritation, headache, nausea, vomiting and fainting.		
- Other classic effects: (e.g. unconsciousness, particularly toxic metabolites, etc.):	May cause drowsiness or dizziness. Hypoxia may occur if oxygen levels in the air drop below 17%.		
- Permanent effect due to acute or chronic exposure:	Longer exposure by breathing through the skin or swallowing may cause greater health damage. May cause lung damage if swallowed.		
- Special effects			
- mutagenicity:	May cause genetic damage.		
- carcinogenicity:	May cause cancer.		
- fertility decrease:	Suspected of damaging fertility or the unborn child.		
- harmful effect on unborn child:	No data available.		
- toxicity to reproduction:	No data available.		
- other (e.g. endocrine disruptors):	No data available.		
- Toxicokinetics:	No data available.		
- Prohibitions and restrictions:	No data available.		
- Other:	No data available.		

12. ECOLOGICAL INFORMATION

12.1. Eco-toxicity

- to aquatic organisms: From literature:
EL₅₀= 4.5 mg/L (*Daphnia magna*)
EL₅₀= 3.1 mg/L (72 h, *Selenastrum capricornutum*)
LL₅₀= 8.2 mg/L (*Pimephales promelas*)
- to ground organisms: As shown by experience data, hazardous for organisms in the ground.
- to plants and land animals: As shown by experience data, hazardous for plants and animals.

12.2. Mobility

- known or predicted distribution to environmental compartments: **Method:** No data available.
Not soluble in water.
- surface tension: No data available.

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- absorption/desorption: No data available.
- other physical and chemical properties: See section 9.

12.3. Persistence/degradability

- biotic degradation: Not applicable.
- other degradation processes: No data available.
- degradation in wastewater: Experience data show that it may have long-term harmful effect in water. It creates a surface film that evaporates relatively quickly, however, if major quantities get spilled, due to oxygen lack it may have harmful effect on aquatic organisms.

12.4. Bio-accumulation

- bio-concentration factor (BCF): No data available.

12.5. Results of PBT assessment

- data from chemical safety report: The product does not meet the criteria for PBT or vPvB classification in Annex XIII of REACH.

Other data: No data available.

13. DISPOSAL CONSIDERATIONS

- Preferred disposal considerations:

- **Waste from residues:** The product has no classic waste, except in case of accidental spills. In that case see section 6. Polluted residue thermal treatment is stipulated.
- **Contaminated packaging:** Not applicable.
- **Local applicable regulations:** Sustainable Waste Management Act; Decree on Categories, Ordinance on Waste Catalogue; Ordinance on waste management.

14. TRANSPORT INFORMATION

- Transport classification signs:

- Name of hazardous chemical according to international contracts on transport of hazardous substances:

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Road/Rail transport (ADR / RID):

UN number: 1203 class: 3 risk label: 3 packaging group: II

Inland Waterway (ADNR):

UN number: 1203 class: 3 risk label: 3 packaging group: II

Sea transport (IMDG):

UN number: 1203 class: 3 risk label: 3 packaging group: II

Air transport (ICAO/IATA):

UN number: 1203 class: 3 risk label: 3 packaging group: II

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- **Additional regulations:** Hazardous Materials Transport Act, European Agreement on International Road Transport of Hazardous Materials (ADR – Appendixes A and B), Regulation on the Prevention Major Accidents Involving Dangerous Substances.
- **Special precautions and transport conditions:** No data available.

15. REGULATORY INFORMATION

- **Applicable EU regulations:** EU Regulation No. 1907/2006 and No. 1272/2008 of the European Parliament and the Council;
Commission Regulation (EU) No 453/2010 of 20 May 2010 (amending Regulation (EC) No. 1907/2006 (REACH);
EU Regulation No. 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer;
EU Regulation No. 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals;
EU Regulation No. 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants;
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
- **Applicable national regulations:** Chemicals Act; Regulations on Hazardous Chemicals Classification, Marking, Labelling and Packaging; Regulations on Hazardous Substance Exposure Limit Values during Work and Biological Limit Values;
- **Chemical Safety Assessment carried out (CSA):** YES x NO
- **Authorization information:** -
- **Restriction information:** -

16. OTHER INFORMATION

Revision indicators

- | Section: | Subject of change: |
|-----------------------|---|
| Section 2. | Data on classification and labelling according to Regulation (EC) No 1272/2008 (CLP/GHS changed). |
| Section 2, 3, 11, 16. | Classification data according to directive 67/548/EEC or 1999/45/EC removed. |
| Section 3. | Data on component concentration changed. |
| Section 5. | Section completely revised. |
| Section 9. | Data on physical – chemical properties changed. |
| Section 12. | Data on eco-toxicity, mobility and persistence/degradability changed. |
| Section 14. | Data on packaging group changed. |

Full text of H- phrases, EUH- and P-phrases:

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H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.
P201	Obtain special instructions before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P331	Do NOT induce vomiting.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Abbreviations and acronyms:

CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
EL50	Effective loading, 50%
PBT	Persistent, bioaccumulative and toxic
vPvB	Very persistent and very bioaccumulative
STOT (RE)	Specific Target Organ Toxicity (Repeated Exposure)
STOT (SE)	Specific Target Organ Toxicity (Single Exposure)
UVCB	Unknown or Variable composition Complex reaction product or Biological origin
LD₅₀	Lethal Dose, 50%
LC₅₀	Lethal Concentration, 50%

Statement:

This SDS is in compliance with the EU Regulation No. 1906/2007 and No. 1272/2008 of the European Parliament and the Council. It contains important user health and safety and environmental protection information. The information provided herein is not a substitute for any specification of quality and should not be deemed as a guarantee of the adequacy and applicability of this product for any purpose whatsoever. All information provided herein is based on our current knowledge and compliant with applicable legal regulations. The user is responsible for adherence to relevant legal regulations.

Data source:

1. www.hzt.hr
2. <http://echa.europa.eu/hr>
3. Concawe Report 10/14, *Hazard classification and labelling of petroleum substances in the European Economic Area – 2014*

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APPENDIX: EXPOSURE SCENARIOS ACCORDING TO CHEMICAL SAFETY REPORT
